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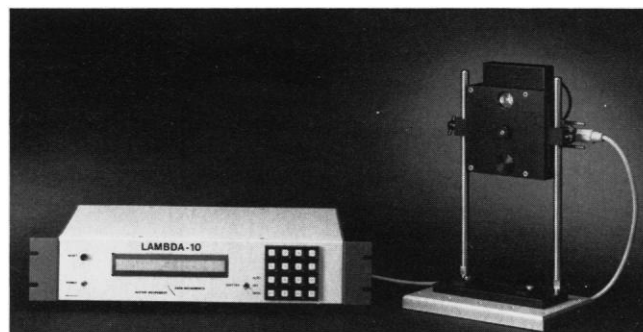
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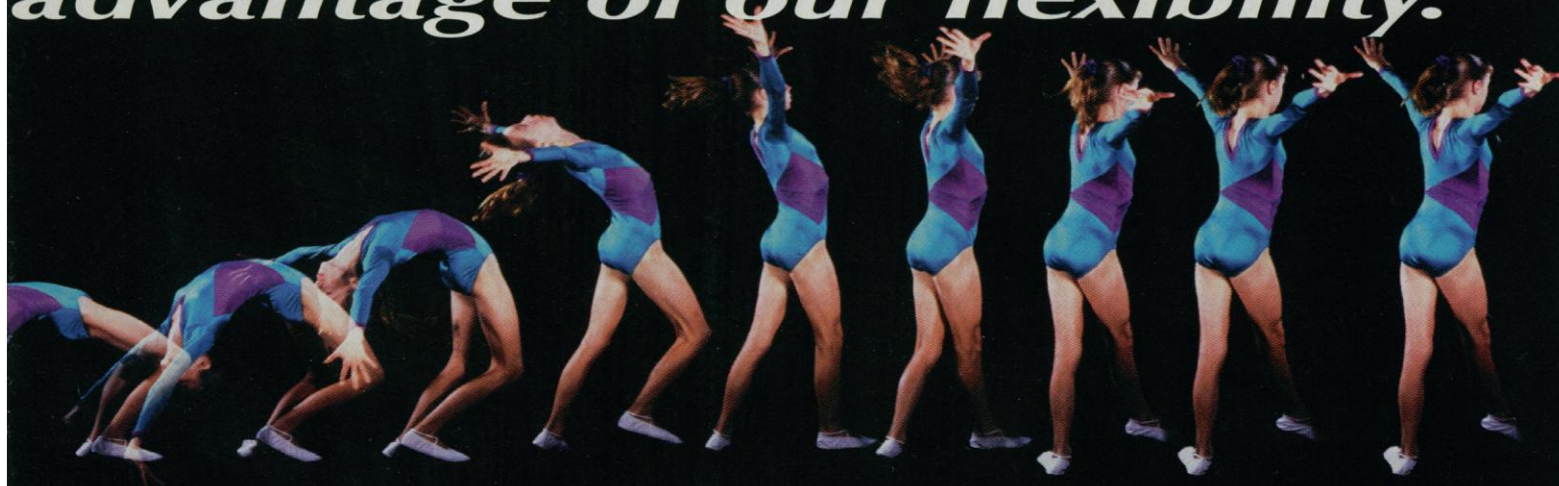
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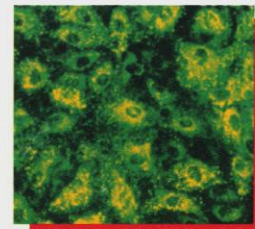
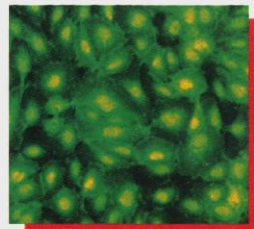
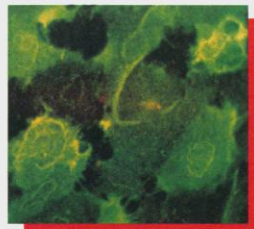
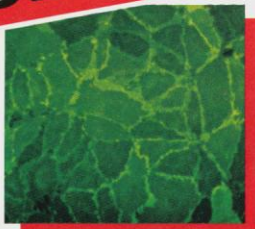


# EndoPack®-MVd

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Clonetics' EndoPack®-MVd, normal human dermal microvascular endothelial cells (HMVEC d) in EGM®-MV, Microvascular Endothelial Cell Growth Medium, stained positive for acetylated LDL



Enlargements of Clonetics' normal human dermal microvascular endothelial cells (HMVEC d) stained positive for (from left to right) PECAM, ELAM, FITC-Ulex Europaeus and von Willebrand Factor

Clonetics announces the introduction of its new dermal microvascular endothelial cell system, EndoPack®-MVd. EndoPack®-MVd is a complete cell system containing cryopreserved cells, optimized low serum (5%) medium (EGM®-MV) and all the necessary reagents for subculture and propagation of the cells *in vitro*. This cell system is of great interest to researchers working in wound healing, inflammation and neo-vascularization in tumor growth. EndoPack®-MVd provides a state-of-the-art *in vitro* model directed at elucidating and controlling these processes.

Clonetics' EndoPack®-MVd is one of 15 complete normal human cell systems providing skin, vascular and airway cells. All systems are performance and virus tested. You may also purchase each component from any system separately. Clonetics also offers custom services including custom primary cell isolations and expansions and custom media formulations. For more information, in the US & Canada call

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## FITC Conjugation Kit

The FluoroTag Kit is for the simple and rapid conjugation of fluorescein isothiocyanate (FITC) to immunoglobulins for immunohistochemistry and for immunofluorescence studies using flow cytometry. Designed for labeling monoclonal and polyclonal antibodies, the kit can also be used to label other proteins, peptide hormones, cytokines, and growth factors. **Sigma Immunochemicals. Circle 141.**

## Fluorescent mAb Kit

The FluoroLink monoclonal antibody (mAb) labeling kit provides a simple, two-step method for directly tagging small quantities of mAbs or other proteins with the Cy3 (orange), Cy5 (far-red), and FluorX (green) fluorescent dyes. The dyes are supplied as water soluble NHS-esters. Conjugations with the dyes run smoothly under mild, aqueous conditions at room temperature, minimizing the loss of biological activity in the target molecule. Purification of the reaction mixture by gel filtration chromatography allows for nearly 100% recovery of antibody. **Biological Detection Systems. Circle 142.**

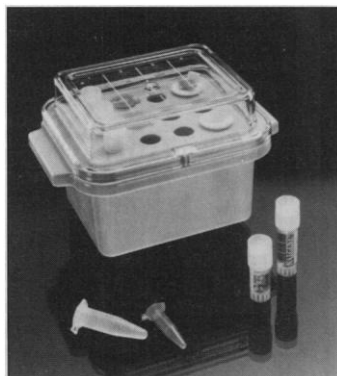
## Engineering and Biotech Database

The comprehensive Dialog OnDisc Chemical Engineering and Biotechnology Abstracts (CEABA) database is now available on CD-ROM. Produced by the Royal Society of Chemistry in the United Kingdom and the German Society for Chemical Equipment, Chemical Technology, and Biotechnology, CEABA provides 14 years of bibliographic and abstracted information from the world's key literature in chemical engineering and biotechnology, from theory and processes to plants, equipment, and reaction engineering, and includes safety and environmental aspects. The content is regularly

updated from more than 500 professional journals as well as from reports, newsletters, conferences, and books. **Dialog Information Services. Circle 143.**

## Benchtop Chiller

The Nalgene Quick Chill unit rapidly and repeatedly chills biological samples for use in molecular biology applications such as ethanol precipitation of DNA



and RNA samples. It can be used repeatedly for up to 45 min, eliminating the expense and inconvenience of dry ice and alcohol baths. Molded of durable polycarbonate and prefilled with a non-toxic insulating solution, the Quick Chill unit chills up to 1.5 ml of alcohol-based solutions to  $-20^{\circ}\text{C}$  in less than 3 min, or up to 1.5 ml of water-based solutions to  $0^{\circ}\text{C}$  in less than 4 min. It holds 12 1.5-ml or 0.5-ml microcentrifuge tubes in a three by four array. There is no direct contact between the tubes and the chilling solution so labels and markings won't come off. **Nalge. Circle 144.**

## Statistical Software for Experimenters

Version 3 of Design-Ease software sets up and analyzes two-level factorial, fractional factorial (up to

15 variables), and Plackett-Burman designs (up to 31 variables). Users can add center points to the designs to test for curvature. The design editor allows experimenters to add or delete points, change blocks, or make other changes. Design-Ease then prints the resulting runs, randomized to prevent bias, as the user's recipe for the experiment. After completing the test runs, experimenters can enter up to 9 responses. The program produces a normal plot that shows the critical effects at a glance. The program runs under Microsoft Windows or Apple Macintosh operating systems. **Stat-Ease. Circle 145.**

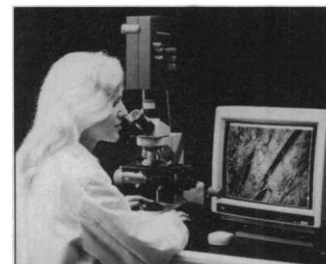
## Biocides Against Microbial Contamination

The biocides Bromonitrodioxane, Methylisothiazolone, and Micr-O-Protect for the protection of aqueous solutions and suspensions (such as buffers or column materials) are effective against nearly all types of bacteria, yeasts, and fungi over a broad pH range. They show practically no interference with assays and column materials and avoid all disadvantages of azide regarding toxicity and mutagenicity. **Boehringer Mannheim. Circle 146.**

## Confocal Laser Fluorescence Scanner

The Brite\*i Confocal Laser Scanner is a compact, high-resolution system for both inverted and upright microscopes that provides a cell biologist with three-dimensional images of biomedical activity for only half the cost of currently available instruments, according to the manufacturer. Chief among the scanner's technical advancements is that it requires no alignment to change

fluorescence filter combinations and different pinholes. Because the two-channel system can display several dozen layers of tissue



material in 0.25- to 0.5- $\mu\text{m}$ -depth increments, the automatic centering and alignment capability enhances the system's three-dimensional imaging by guaranteeing perfect registration of each "slice," or sectional scan of a cell. **Technical Instrument. Circle 147.**

## Literature

*The Hybrid Capture System* is a brochure on a solution hybridization assay that uses capture antibody techniques for direct chemiluminescent detection of infectious disease targets. The brochure highlights unique features of the system, including uncomplicated specimen preparation, use of a universal capture antibody specific for RNA-DNA hybrids, multiple binding sites for signal amplification, glow chemiluminescence, ability to quantify, and same day results. **Digene Diagnostics. Circle 148.**

*Medium-Pressure Gel Filtration Chromatography Using the Dionex DX 500 HPLC System* is an application note detailing conditions, preparation of samples and reagents, equipment, and results. **Dionex. Circle 149.**

*1994 Product Catalog for Microbiology* provides 170 pages on more than 2300 products. New products include the ESP Blood Culture System, EZ Streak Urine Culture Device, Bacto Prepared Sterility Bottles, and a Custom Media Development Program. **Difco Laboratories. Circle 150.**

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.



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## POSITIONS OPEN

### BIOCHEMIST

The Department of Cell Biology at the Medical University of South Carolina is seeking a senior-level, tenure-track faculty member (**ASSOCIATE or FULL PROFESSOR**). Interested candidates must have a strong record of accomplishment in the area of protein-protein interactions, protein microsequencing and expression of polypeptides in bacterial and eukaryotic expression systems. Individuals must be willing to establish collaborations with Departmental colleagues and faculty in the Cardiovascular Development Biology Center. The area of interest is in the structure and function of extracellular matrix, especially as a mediator of external cell signals. Previous records of successful funding and an active research program are essential. Excellent new laboratory space and core equipment facilities are in place. Teaching is required in the medical and/or graduate curriculum. Highly competitive salaries and start-up packages are available. Send curriculum vitae and a list of three references to: **Charles Little, Ph.D., Department of Cell Biology, Medical University of South Carolina, 171 Ashley Avenue, Basic Science Building, Charleston, SC 29425-2204.** An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

### FACULTY POSITION IN MICROBIAL PATHOGENESIS

The Department of Microbiology and Immunology at the Medical University of South Carolina, College of Medicine, invites applications for tenure-track positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Applicants should have relevant doctoral degree and background in the area of microbial pathogenesis. Successful candidates will participate in the teaching of graduate students and will undertake a vigorous independent research program in an area relevant to microbial pathogenesis. Applicants should send curriculum vitae, a brief summary of ongoing research interests and future research plans, and the names of three references to: **Gabriel Virella, M.D., Ph.D., Professor, Department of Microbiology and Immunology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.** Response deadline: October 1, 1994. An Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSORSHIP INORGANIC CHEMISTRY PRINCETON UNIVERSITY

The Department of Chemistry at Princeton University invites applications for an **ASSISTANT PROFESSORSHIP** from individuals whose research interests are in inorganic chemistry, broadly defined. Application should include a description of research interests, a curriculum vitae, and three letters of recommendation, and should be sent by November 1, 1994, to: **Inorganic Chemistry Recruiting Committee, Department of Chemistry, Princeton University, Princeton, NJ 08544.** Princeton University is an Equal Employment Opportunity/Affirmative Action Employer.

**ASSISTANT/ASSOCIATE PROFESSOR OF PHARMACOLOGY AND TOXICOLOGY.** The University of North Dakota School of Medicine invites applications for a tenure-track (12-month) position at the rank of **ASSISTANT OR ASSOCIATE PROFESSOR OF PHARMACOLOGY AND TOXICOLOGY.** Applicants should have a Ph.D. in pharmacology, toxicology, or related area and be Board-eligible/Board-certified by the American Board of Toxicology. A major responsibility for the position is to provide supervision, consultation, and service to the North Dakota State Department of Health and Consolidated Laboratories related to alcohol measurement and intoxication, and in the general area of environmental health and risk assessment. Applicants should show potential for the development of a strong, extramurally funded research program in toxicology. In addition to a complete curriculum vitae, applications should include a letter addressing faculty rank requested, research goals, and previous experience in toxicology. Three letters of recommendation should be arranged by the candidate. Review of completed applications will begin September 1, 1994, and will continue until the position is filled. Submit applications to: **Dr. David W. Hein, Chairman, Department of Pharmacology and Toxicology, University of North Dakota School of Medicine, 501 North Columbia Road, Grand Forks, ND 58202-9037.** The University of North Dakota is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### CELL BIOLOGIST

**ASSISTANT PROFESSOR OF MOLECULAR AND CELLULAR BIOLOGY**—The Division of Biological Sciences, University of California, Davis, invites applications and nominations for an Assistant Professor of Molecular and Cellular Biology. This is a tenure-track position in the Section of Molecular and Cellular Biology within the newly reorganized Division and could include an initial appointment in the Agricultural Experiment Station. A Ph.D. (or equivalent) is required and postdoctoral experience is desirable. Candidates must have an outstanding record of achievement in research and will be expected to develop a strong research program in cell biology. This position reflects the Section's ongoing commitment to building strength in basic cell biology. The successful candidate will be expected to teach at the undergraduate and graduate level and to participate fully in advising and teaching programs. Candidates should submit a curriculum vitae, a statement of their current and proposed research, and a statement of teaching experience and/or interests, and arrange to have three letters of recommendation sent to: **Dr. Jonathan Scholey, Chair, Search Committee, Section of Molecular and Cellular Biology, Division of Biological Sciences, University of California, Davis, CA 95616-8519.** Closing Date: Open until filled, but all application materials including letters of recommendation must be received before October 1, 1994, to be assured full consideration. The University of California does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, or sexual orientation. An Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSOR

Applications are invited for a position at the level of **ASSISTANT PROFESSOR** (tenure-track) in the Department of Chemistry at Stanford University. A preference will be given to individuals teaching organic chemistry. Appointment would commence on September 1, 1995. Applicants must be strongly motivated toward creative research and have a commitment to teaching at the undergraduate and graduate levels. Applicants should send 1) current curriculum vitae; 2) a list of publications; and 3) a brief statement of research interests (three pages or less) to: **Prof. Robert Pecora, Chairman, 1995 Search Committee, Department of Chemistry, Stanford University, Stanford, CA 94305-5080.** Applicants should arrange to have three letters of recommendation sent on their behalf directly to the address listed above. Completed applications must be received by October 15, 1994. Stanford University is committed to Equal Opportunity through Affirmative Action in employment and is especially eager to identify minority persons and women with appropriate qualifications.

### UNIVERSITY OF PENNSYLVANIA DEPARTMENT OF CHEMISTRY

As part of a continuing development program, the Department of Chemistry at the University of Pennsylvania expects to make an appointment in Biological Chemistry. The appointment will be at the **ASSISTANT PROFESSOR** (tenure probationary) level with the area of research interest in Theoretical and Computational Structural Biology. Applicants should send their curriculum vitae, list of publications, and a description of proposed research to: **Amos B. Smith, III, Chairman, Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6323,** by October 15, 1994. Applicants should also arrange three letters of reference to be sent to the same address. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

**ASSISTANT/ASSOCIATE/FULL PROFESSOR** for academic-year, tenure-track, faculty position in Natural Resource Remote Sensing to teach introductory and advanced remote sensing courses, advise students, and develop an active research program (salary/rank negotiable). Ph.D. and one degree in natural resource science or equivalent experience required. Submit applications, including full curriculum vitae, transcripts for all degrees, and names of three references, to: **Professor Steven Running, Search Committee Chair, School of Forestry, The University of Montana, Missoula, MT 59812.** Telephone: 406-243-5522; FAX: 406-243-4845. Application review begins November 1, 1994. University of Montana is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### NUTRITIONAL PHYSIOLOGIST

The Department of Animal Sciences at The University of Arizona invites applications for a 12-month, tenure-track faculty position at the rank of **ASSISTANT PROFESSOR** in the area of nutritional physiology. Candidates must have a Ph.D. in nutrition, physiology or related area with the expectation that the successful applicant will teach undergraduate and graduate courses in ruminant nutrition and will conduct a vigorous, externally funded research program, preferably in the area of post-absorptive nutrition. Applicants combining aspects of whole animal nutrition with modern biological approaches to the study of nutrient utilization, growth or lactation are particularly encouraged to apply. Postdoctoral or extensive research experience is highly recommended. Evaluation of applicants will begin on October 1, 1994, and will continue until the position is filled. Applicants should send a letter of application, curriculum vitae, statement of research interests and the names and addresses of three references to: **Dr. Parker B. Antin, Chair, Nutritional Physiology Search Committee, Department of Animal Sciences, Room 205 Shantz Building, University of Arizona, Tucson, AZ 85721.** *The University of Arizona is an Affirmative Action/Equal Opportunity/ADA Employer.*

The University of Illinois at Chicago Department of Psychology invites applications for a tenure-track **ASSISTANT PROFESSOR** or beginning (tenured) **ASSOCIATE PROFESSOR** in Biopsychology beginning in fall 1995. Applicants must have a Ph.D. and an active research program in behavioral or integrative neuroscience, employing animal models with an emphasis on central mechanisms. Submit letter of application, curriculum vitae, and three letters of reference to: **Dr. David Wirtshafter, Chair, Biopsychology Search Committee, Care of Cheryl McMillan, Department of Psychology (M/C 285), The University of Illinois at Chicago, 1007 West Harrison Street, Chicago, IL 60607-7137.** Applicants should provide evidence of their potential to teach effectively and conduct productive research. To ensure full consideration, applications should be received by November 15, 1994. *Equal Opportunity/Affirmative Action Employer.*

### WHEATON COLLEGE, Wheaton, Illinois

Department of Biology seeking application/nomination for **BOTANIST, ASSOCIATE or PROFESSOR LEVEL.** Experience in management of academic program or similar experience. Teaching expectations are plant physiology, plant morphology, plant taxonomy, ultrastructure, introductory majors and non-majors courses. Possible teaching at Science Station in South Dakota. Contact: **Dr. Rodney Scott, Department of Biology, Wheaton College, Wheaton, IL 60187.** Closing date November 1, 1994.

Wheaton College is an evangelical Christian liberal arts college whose faculty and staff affirm a Statement of Faith and adhere to lifestyle expectations. *The College complies with federal and state guidelines for nondiscrimination in employment. Women and minority applicants are encouraged to apply.*

### ASSISTANT/ASSOCIATE/FULL PROFESSOR Signal Transduction and Cell Regulation

The Department of Biochemistry and Molecular Biology at Indiana University School of Medicine is seeking applicants for a full-time, tenure track position at the **ASSISTANT, ASSOCIATE or FULL PROFESSOR** level. Applicants should have a Ph.D., M.D., or equivalent degree and postdoctoral experience. It is expected that the new faculty member will develop independent research programs and participate in the teaching of medical and graduate students. Competitive space and start-up funds are available. The Department is seeking an individual with interest in the molecular basis of signal transduction in eukaryotes, including such areas as receptor function, second messenger generation, regulatory protein-protein interactions, covalent modification of proteins and mechanisms for the control of intracellular target proteins and genes. The Department seeks to strengthen existing ties with the School's Diabetes and Cancer Centers. Applicants should submit curriculum vitae, a description of research plans, and the names of three references to: **Dr. Peter J. Roach, Search Committee Chair, Department of Biochemistry and Molecular Biology, Indiana University School of Medicine, Indianapolis, IN 46202-5122.**

*Indiana University is an Equal Opportunity/Affirmative Action Educator, Employer and Contractor. Male/Female.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR NEUROBIOLOGY

The Department of Anatomy and Neurobiology, University of Kentucky, invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level. Candidates must hold a Ph.D. and/or M.D. or equivalent degree with appropriate postdoctoral experience and publications. Both positions are for neurobiologists using cellular and/or molecular approaches to investigate development and/or regeneration and plasticity in the CNS. Each successful candidate is expected to develop a strong research program and contribute to departmental teaching responsibilities in medical and graduate education. Salary and start-up funds are highly competitive. The Department offers a stimulating environment and is committed to the highest quality in research and teaching. Application deadline is October 15, 1994. Interested candidates should submit curriculum vitae, descriptions of teaching experience, current and future research goals, and names and addresses of three references to: **Dr. Don Marshall Gash, Professor and Alumni Chair, Department of Anatomy and Neurobiology, University of Kentucky, MN224 Chandler Medical Center, Lexington, KY 40536-0084.** *The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.*

### MOLECULAR NEUROBIOLOGIST

Department of Anatomy and Neurobiology  
University of Vermont College of Medicine

Applications are requested for a tenure-track **ASSISTANT PROFESSOR** position, effective July 1, 1995, for a CNS molecular neurobiologist with research expertise in either plasticity and regeneration or cellular signal processing. The individual should have at least three years of postdoctoral experience and provide evidence that he/she will develop a strong independent research program. The individual will be expected to participate in the graduate program and teach in departmental neuroscience courses. Start-up funds and salary are competitive. Send curriculum vitae, description of research, and three letters of recommendation to: **Dr. Cynthia Forehand, Chair, Molecular Neurobiologist Search Committee, Department of Anatomy and Neurobiology, University of Vermont College of Medicine, Burlington, VT 05405.** Telephone: 802-656-2230. FAX: 802-656-8704. Email: C.Forehand@uvmvax.uvm.edu. Information accepted through October 1, 1994. *The University of Vermont is an Equal Opportunity/Affirmative Action Employer. Women and people from diverse racial, ethnic and cultural backgrounds are encouraged to apply.*

### VICE CHAIR PSYCHIATRIC RESEARCH

Birmingham—University of Alabama at Birmingham and Department of Psychiatry and Behavioral Neurobiology accepting applications for position of **VICE CHAIR** for Psychiatric Research (endowed chair) and **DIRECTOR**, Division of Behavioral Neurobiology. M.D. or Ph.D. Ideal candidate would have 10 or more years of experience in the field, a distinguished record in neuroscience research, a well-known and respected body of basic/clinical research, and superior research administrative skills. Should demonstrate a commitment to excellence in education and training, ability to effect integration of clinical and basic research functions, and to mentor junior faculty researchers. Goal is to develop a nationally recognized psychiatric research program.

Position at rank of **ASSOCIATE or FULL PROFESSOR**, tenured or tenure-earning. Highly competitive salary/benefits package. Applications to: **Robert O. Friedel, M.D., Chairman, Department of Psychiatry, University of Alabama at Birmingham Station, Birmingham, AL 35294-0018.** *Affirmative Action/Equal Opportunity Employer.*

### DEAN COLLEGE OF SCIENCE

California State Polytechnic University, Pomona, California, is seeking applications and nominations for **DEAN OF THE COLLEGE OF SCIENCE.** Required qualifications: earned doctorate; record of research, teaching and scholarship to support a senior faculty appointment; and three or more years of administrative experience requiring academic leadership and stewardship. For application/job description, Telephone: 909-869-3409; FAX: 909-869-4395; or Email: **SJCARDONA@CSUPomona.EDU.** *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### THE INSTITUTE FOR MOLECULAR MEDICINE AND GENETICS Program in Molecular Immunology

We are developing a new initiative in molecular immunology that will focus on regulatory mechanisms of the immune system. This program will interface with clinical programs in connective tissue diseases and diabetes and will seek to understand etiologic mechanisms for autoimmunity.

A new research building and a new state-of-the-art transgenic animal facility are under construction and will serve the needs of this program. Multiple positions are available with appropriate Departmental appointments at the **ASSISTANT to FULL PROFESSOR** levels. Applicants should have a strong background in molecular genetics, MHC biology, biochemical and cell biological features of antigen processing, or the developmental biology of the immune system. Reply with curriculum vitae to:

**Howard Rasmussen, M.D., Ph.D.**  
Director, Institute of Molecular Medicine  
and Genetics  
Medical College of Georgia  
Augusta, GA 30912-3100  
FAX: 706-721-7915

*MCG is an Equal Opportunity Employer. Women, minorities and disabled persons are encouraged to apply.*

### ASSISTANT PROFESSOR BIOLOGICAL CHEMISTRY/MOLECULAR BIOLOGY

The Department of Biological Chemistry, College of Medicine, University of California, Irvine, invites applications for a tenure-track appointment at the **ASSISTANT PROFESSOR** level. Individuals with research experience and interests in the areas of molecular genetics, macromolecular processing and its control, structural biology and developmental processes are particularly encouraged to apply. Faculty members are expected to develop strong, independent research programs and to participate in the teaching of medical students and graduate students in a campus-wide joint graduate program in molecular biology, genetics and biochemistry.

Applicants should send curriculum vitae, statements of proposed research and three letters of recommendation by November 1, 1994, to: **Search Committee Chair, Department of Biological Chemistry, College of Medicine, University of California, Irvine, CA 92717-1700.**

*The University of California is an Equal Opportunity/Affirmative Action Employer.*

### MICROBIAL PATHOGENESIS

The Department of Microbiology and Immunology, University of North Dakota invites applications for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR** in the area of the molecular, genetic or cellular aspects of microbial pathogenesis. The successful candidate is expected to establish an independent, externally funded research program complementing existing research in the department. Teaching responsibilities include a course in medical microbiology and the development of a graduate course in the candidate's discipline. Candidates must have a Ph.D. in microbiology or a related field and relevant postdoctoral experience. Applicants should submit a curriculum vitae, a two-page statement of research interests, two representative publications and three letters of reference to: **Dr. James J. Kelleher, Chair, Search Committee, Department of Microbiology and Immunology, School of Medicine, University of North Dakota, Grand Forks, ND 58201.** Review of applications will begin November 1, 1994. *University of North Dakota is an Equal Opportunity/Affirmative Action Employer.*

Vertebrate Paleontology, Yale University. The Department of Geology and Geophysics invites applications for one or more **SENIOR POSITIONS** beginning September 1995. We are particularly interested in scientists whose work will draw upon the strength of Yale's historical collections in vertebrate paleontology. Send résumé, publications and three reference names to: **Professor Ronald Smith, Chair, Yale University, P.O. Box 208109, New Haven, CT 06520-8109.** FAX: 203-432-3134, by October 15, 1994. *Yale University is an Affirmative Action/Equal Opportunity Employer and invites applications from all qualified candidates.*





# *Call For Papers*

## Life Sciences & Space Medicine Conference '95

### Bringing Space Benefits Down to Earth

Houston, Texas  
April 3-5, 1995

Life Sciences & Space Medicine Conference '95, a joint effort of the National Aeronautics and Space Administration/Johnson Space Center (NASA/JSC) and the American Institute of Aeronautics and Astronautics (AIAA), hereby issues an official *Call for Scientific and Technical Papers*.

Submissions for presentation will be considered on the following topics: *Medical Sciences and Systems, Biological Sciences and Systems, Human Factors Engineering, Space Physiology,*

*Extra-Vehicular Activity, Applications of Technology to Life Sciences, and International Cooperation in Life Sciences.*

Send your abstract of at least 600 words no later than 19 September 1994 to:

AIAA, The Aerospace Center, Dept. A1  
370 L'Enfant Promenade SW, Washington, DC  
20024-2518. For more  
information, call  
1-800-615-0190.



**LIFE SCIENCES &  
SPACE MEDICINE  
CONFERENCE '95**

*Bringing Space Benefits Down To Earth*

## POSITIONS OPEN

**ACADEMIC DIVISION HEAD.** The School of Biological Sciences at the University of Missouri-Kansas City seeks a distinguished researcher and educator with a proven ability to attract extramural funds in biochemistry and molecular biology. The **DIVISION HEAD** (director) oversees the academic division and directs the expansion of its Ph.D. program in molecular biology and biochemistry. The successful candidate should have a demonstrated record in extramurally funded research accomplishments and excellence in graduate teaching and supervising Ph.D. students. Interested applicants should have earned tenure at a U.S. university and have the capability to administer a complex department with duties in the undergraduate and graduate programs and service courses to the health professions. This person is expected to develop a growing academic interdisciplinary program including the recruitment of additional faculty with proven ability for attracting independent external research funding in molecular recognition, with emphasis in macromolecular structure and organization, and molecular basis of signal transduction. Selection of candidates will begin October 15, 1994, and continue until a successful candidate is identified. Applicants should submit a curriculum vitae and outline of research interest and names of three references from academic institutions. *University of Missouri-Kansas City is an Equal Opportunity, Affirmative Action Employer.* Send correspondence to: **MBB Head Search, University of Missouri-Kansas City, Dean's Office, School of Biological Sciences, 5100 Rockhill Road, Kansas City, MO 64110.**

### VICE PRESIDENT FOR RESEARCH MEDICAL COLLEGE OF GEORGIA

The Medical College of Georgia invites applications and nominations for the position of **VICE PRESIDENT FOR RESEARCH**. The Vice President for Research, reporting directly to the President, will be the senior administrative leader of research development efforts. This will involve all aspects of research program planning and implementation. In particular, the Vice President will serve a liaison and advocacy function not only with the university administration, but also with federal, foundation, and corporate research entities. The Vice President also oversees various research support services, including the Office of Grants and Contracts. The successful candidate should have a doctoral degree or its equivalent, as well as established scientific and academic credentials reflecting significant expertise in the development and funding of research efforts. Academic appointment to one of the departments within the institution is desirable, and opportunities exist for ongoing involvement in academic and research programs. Interested applicants should submit a curriculum vitae, a cover letter describing the candidate's research, academic and administrative experience, and the names and addresses of three references no later than October 1, 1994, to: **Dr. Barry D. Goldstein, Chair of Search Committee, Medical College of Georgia, 1120 15th Street, Augusta, GA 30912-7605.** *The Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority candidates are encouraged to apply.*

### TEACHING POSITION IN PHARMACOLOGY

The Department of Pharmacodynamics in the College of Pharmacy at the University of Florida is seeking an **ASSISTANT/ASSOCIATE SCHOLAR** to join the department January 1, 1995. The position will involve full-time effort in teaching of Pharmacology and Pathophysiology to undergraduate Pharmacy students. The position is a nine-month, non-tenure-accruing faculty position which is renewable annually. Applicants must have a Ph.D. in Pharmacology or a related field and must have previous teaching experience. Applicants should submit curriculum vitae, a statement of teaching experience and interests, and letters from three references by September 30, 1994, to: **Dr. Ralph Dawson, Chair, Pharmacodynamics Search Committee, Box 100487, University of Florida, Gainesville, FL 32610. FAX: 904-392-9187.**

If any candidate needs an accommodation for this position due to disability, please contact Dr. Ralph Dawson at 904-392-3490. *The University of Florida is an Equal Opportunity/Affirmative Action/ADA Employer.* The selection process will be conducted under the provisions of Florida's "Government in the Sunshine" and Public Records laws. Search committee meetings and interviews will be open to the public, and all applications, résumés, and other documents related to the search will be available for public inspection.

## POSITIONS OPEN

### DEPARTMENT OF CHEMISTRY CHAIRPERSON

Carthage College seeks a **CHEMISTRY DEPARTMENT CHAIR** who will lead a dynamic ACS-accredited department. The chair will be responsible for developing increasingly strong programs for majors and non-majors and promoting student research. The College has experienced significant growth in recent years and is encouraging students to choose majors in the natural sciences.

Candidates must have a Ph.D. in inorganic/analytic, organic, physical, or biochemistry. In addition to formal scholarly credentials, applicants must have an enthusiastic commitment to teaching in a small college environment of personalized and success-oriented education. Appointments will be made at the associate or full professor level, appropriate to qualifications.

Located on the shore of Lake Michigan midway between Milwaukee and Chicago, Carthage is a liberal arts college affiliated with the Evangelical Lutheran Church in America. Send curriculum vitae, letters of reference, and statements of teaching and leadership philosophies to: **Donald M. Michie, Dean of the College, Carthage College, Kenosha, Wisconsin 53140-1994.**

Midlands Technical College, a two-year comprehensive community college in Columbia, South Carolina, offers associate degree, diploma, and certificate programs. The institution is publicly supported and part of the South Carolina Technical Education System and is accredited by the Southern Association of Colleges and Schools. The college is seeking qualified applicants for a **SCIENCE DEPARTMENT CHAIR** (Vacancy #1456). Duties are to provide instructional management, personnel supervision and evaluation, program and curriculum development and assessment, and accurate and timely reports for the courses and programs within the department. Will also provide instruction to students who are enrolled within the department. M.A. or M.S. in Chemistry, Physics, or a Biological Science required; Ph.D. preferred. Must have a minimum of three years of experience teaching lecture and laboratory courses in a postsecondary institution, preferably at a community college. Demonstrated excellence in teaching and learning. Experience in leadership, personnel management, and curriculum development. Must have effective oral and written communication skills. Competitive compensation package offered. A letter of application, résumé including three references, and transcripts should be forwarded to: **Midlands Technical College, Human Resource Management Division, Post Office Box 2408, Columbia, SC 29202.** Deadline: Open until filled, however, suggested response deadline is September 15, 1994. *Affirmative Action/ADA/Equal Opportunity Employer.*

The Departments of Molecular and Human Genetics, and Pediatrics are jointly recruiting a **DIRECTOR** for the Baylor College of Medicine Mental Retardation Research Center (MRRC). The Baylor MRRC was founded in 1988, and is one of the 14 NICHD-supported Centers dedicated to the study of the prevention, treatment, and amelioration of mental retardation and developmental disabilities. The Baylor MRRC currently supports eight core laboratories, 53 research projects, 48 investigators from 13 departments, and one New Project Development Award. The successful applicant will be a Physician Scientist with an established research commitment to the molecular biology of mental retardation. Board certification in a Medical Genetics specialty and Pediatrics are desirable. Applicants should send a letter describing their commitment to mental retardation research and a current curriculum vitae, and should request that three letters of reference be sent to: **C. Thomas Caskey, M.D., Chairman, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.** *Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITION IN CHEMISTRY

The Chemistry Department at the University of California, Berkeley, solicits applications for a position as **PROFESSOR** of Chemistry, beginning in fall of 1995, pending budgetary approval. Creative and energetic candidates in organic chemistry, with outstanding qualifications and sufficient experience in research and teaching, are specifically sought. Candidates should send curriculum vitae and a synopsis of their research program to: **Chairman, Faculty Recruiting Committee, Department of Chemistry, University of California, Berkeley, CA 94720.** The final deadline for receipt of applications is December 1, 1994. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS

Applications are invited for full-time Ph.D. **FACULTY POSITIONS** in medical physiology, pharmacology and anatomy. The **ANATOMIST** will be proficient in all subdisciplines of human anatomy. Principal duties involve the teaching of first- and second-year osteopathic medical students in a curriculum utilizing a systems approach. Individuals with evidence of excellence in teaching and/or independent research funding will be given priority. Rank is open based upon qualifications and experience. Review of applications will begin immediately and will continue until the positions are filled. Submit a letter of application, curriculum vitae, and the names and addresses of at least three references to: **Silvia Ferretti, D.O., Dean and Vice President of Academic Affairs, Lake Erie College of Osteopathic Medicine, 1858 West Grandview Boulevard, Erie, PA 16509.** *Lake Erie College of Osteopathic Medicine is an Affirmative Action/Equal Opportunity Employer and encourages female and minority candidates.*

The Department of Molecular Cardiology is seeking a **FACULTY MEMBER** with experience in Molecular Genetics and an interest in the Cardiovascular System. The particular area of emphasis is broad and could include analyses of some of the well-characterized patient populations at the Cleveland Clinic. Appointment will be at a staff level commensurate with the applicant's experience. The successful candidate is expected to develop an independent research program and to be part of a developing molecular genetics group. Molecular Cardiology is a new department in the Research Institute. Its faculty of 20 has interests in the area of protein structure and function, vascular biology, hypertension, cardiac physiology and pathophysiology. It is one of eight departments within the Research Institute with some 80 senior scientists and a support staff of nearly 300. Applicants should send curriculum vitae, a statement of career plans and at least three names of references to: **Dr. Edward F. Plow, Chairman, Search Committee, Department of Molecular Cardiology, (FF20), Research Institute, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.** *The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.*

### International Society for Infectious Diseases PROGRAM MANAGER

Newly created position. To manage the educational, scientific, and other outreach programs of this worldwide association. Based in Boston, the successful candidate will have the opportunity to shape and implement the training, research, and other programs of the Society. We require an individual with strong written and verbal skills in English, who has command of a second language and has demonstrated managerial ability.

Applicants possessing an advanced (graduate) degree and experience in public health, infectious diseases, microbiology, or medicine are encouraged to apply in writing to: **ISID Search, 180 Longwood Avenue, Boston, MA 02115. FAX: 617-731-1541.**

### ENVIRONMENTAL LEADERSHIP

The nonprofit Great Lakes Protection Fund seeks an **EXECUTIVE DIRECTOR** to manage its efforts to ensure the health of the regional ecological system. He or she should have high standards, imagination, leadership qualities, an entrepreneurial style and a commitment to the Fund's goals. Candidates should submit a letter of application and a résumé to the Fund at: **35 East Wacker Drive, Suite 1880, Chicago, IL 60601.** *The Fund is an Equal Opportunity/Affirmative Action Employer.*

### IMMUNOLOGY

Two **POSTDOCTORAL FELLOW POSITIONS** are available to study signal transduction process in the immune system. Research focuses on *in vivo* animal models, and takes a multidisciplinary modern biological approach, including conditional gene targeting. Applicants should have a strong background in molecular biology and/or biochemistry. Experience in gene targeting is not required. Please send curriculum vitae and three letters of reference to: **Dr. Hua Gu, Laboratory of Immunology, NIAID, Room 139, 12441 Parklawn Drive, Rockville, MD 20852. FAX: 301-480-2618.** *NIH is an Equal Opportunity Employer.*



# Postdoctoral Opportunities In The Biomedical Sciences.

Listed below are a few of the outstanding opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

## **Activity-Dependent Nervous System Development** **R. Douglas Fields, PhD**

Regulation of gene transcription, neurite outgrowth, and synaptic remodeling by electrical activity of the nervous system during development are being investigated in our laboratory. Applicants with expertise in signal transduction biochemistry, and the use of molecular biological techniques to study IE gene expression in neurons, or alternatively, expertise in fluorescence microscopy of intracellular ions and cytoskeletal components are desired. Laboratory of Developmental Neurobiology (OE-52), NICHD, Building 49, Room 5A38.

## **Cell Biology** **Hynda K. Kleinman, PhD**

The function of the extracellular matrix, and in particular the basement membrane, in tumor growth and metastasis, angiogenesis, and nerve cell differentiation is studied at the cellular and molecular level *in vitro* and *in vivo*. Studies have focused on active sites duplicated by synthetic peptides, cellular receptors, induced genes, and proteases. Applicants must have less than five years postdoctoral experience. Cell Biology Section (OE-52), NIDR, Building 30, Room 407.

## **Genetic Disorders of Bone** **Joan C. Marini, MD, PhD**

The molecular biology of genetic disorders of bone is being studied to understand how collagen mutations result in defective extracellular matrix, with an emphasis on osteogenesis imperfecta. There is a strong emphasis on molecular therapeutics for dominant disorders. Projects include antisense suppression, generating murine model of non-lethal OI and biology of OI osteoblasts. Position requires broad experience in molecular biology and biochemistry, less than five years postdoctoral experience and US citizenship or permanent residency required. Human Genetics Branch (OE-52), NICHD, Building 10, Room 9S242.

## **Gene Therapy of Neoplasia** **Carter Van Waes, MD, PhD**

Integrins and cytokines which facilitate the progression of squamous cell carcinoma of the head and neck are being investigated as targets for retroviral and ribozyme gene therapy. Applicants with experience in recombinant DNA techniques and less than five years postdoctoral experience required. Head and Neck Surgery Branch (OE-52), NIDCD, Building 31, Room 3C11.

## **Neurobiology of Alcohol Consumption** **Markku Linnoila, MD, PhD**

Operant conditioning techniques are being used to assess CNS mechanisms of interindividual differences in alcohol consumption in nonhuman primates. These procedures are used to pharmacologically assess reward, anxiety, and impulse control mechanisms related to alcohol consumption in rhesus macaques with known rearing and

genetic backgrounds. Laboratory of Clinical Studies (OE-52), NIAAA, Building 10, Room 3C103.

## **Virology, Differentiation, and Cell Culture** **Carl C. Baker, MD, PhD**

The regulation of papillomavirus gene expression during keratinocyte differentiation is being studied. A position is available to develop keratinocyte culture systems for the study of differentiation dependent transcription and alternative RNA processing. Applicants should have extensive experience in the culture and differentiation of primary cells as well as some background in molecular biology and have less than five years of postdoctoral experience. Laboratory of Tumor Virus Biology (OE-52), NCI, Building 41, Room C111.

## **Virology, Differentiation, and RNA Processing** **Carl C. Baker, MD, PhD**

The regulation of papillomavirus gene expression during keratinocyte differentiation is being studied with particular emphasis on posttranscriptional regulation. Studies include identification of the *cis* elements and *trans* factors which regulate polyadenylation, alternative splicing, and mRNA stability. Applicants should have a strong background in molecular biology and experience in RNA processing or mRNA stability. Applicants must have less than five years of postdoctoral experience. Laboratory of Tumor Virus Biology (OE-52), NCI, Building 41, Room C111.

## **Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet ([wylbur.cu.nih.gov](http://wylbur.cu.nih.gov)) or modem (1,301-402-2221 or 1,800-358-2221 with parameters set at "7,Even,1"). When connected to NIH, type in "vt100" for terminal emulation, "F5E" for initials, and "AJL1" for account number.

The *Postdoctoral Research Fellowship Opportunities Catalog*, which describes intramural laboratories at the NIH, is also available by request from the address below. An electronic version of the catalog may be accessed via the Internet using either the Gopher Information System ([gopher.nih.gov](http://gopher.nih.gov)) or the World Wide Web (<http://www.nih.gov/>). When connected, select *Research Opportunities at the NIH from the Office of Education*. If you have further questions, please contact the Office of Education, Building 10, Room 1C129, 10 Center Dr MSC 1158, Bethesda, MD 20892-1158, 301-496-2427.

## **To Apply**

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (e.g., MD, DO, DDS, or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



# National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892  
The NIH is an Equal Opportunity Employer

## POSITIONS OPEN

**ELECTROPHYSIOLOGIST.** Position available at Yale Medical School as **POSTDOCTORAL FELLOW** or **RESEARCH ASSOCIATE**, for patch-clamp who will join ongoing, multidisciplinary program focussing on development and plasticity of channel expression in neurons and glia. Excellent opportunities for collaboration with molecular biological, immunocytochemical, and pharmacological colleagues. Curriculum vitae and three letters of reference by November 7, 1994, to: **Stephen G. Waxman, M.D., Ph.D., Chair, Department of Neurology, P.O. Box 208018, New Haven, CT 06520-8018.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL FELLOWSHIPS** (Two) are available immediately to study cooperative interactions between nuclear and mitochondrial components, gene regulation, and protein assembly of mitochondrial respiratory enzymes. Experience in either biochemistry or molecular biology required. FAX or send curriculum vitae and the names, addresses, telephone and FAX numbers of three references to: **Dr. Mary Crivellone, State University of New York Health Science Center, Department of Biochemistry and Molecular Biology, 750 East Adams Street, Syracuse, NY 13210.** Telephone: 315-464-8744. FAX: 315-464-8750.

### IMMUNOLOGIST/MOLECULAR BIOLOGIST/TRANSGENIC MICE

**POSTDOCTORAL FELLOWSHIP** available to participate in a study of the roles of T cells, macrophages and their cytokines in the pathogenesis of atherosclerosis. We will use transgenic and "knock out" mice obtained from other investigators or produced in our own laboratory for most of our studies. We also plan to begin some human studies in the near future. Candidates will analyze experimental tissues by a wide variety of techniques including flow cytometry, PCR, RT-PCR, *in situ* PCR, *in situ* hybridization and ELISA assays (for cytokines). Candidates with experience in some or all of the above techniques and those with experience in engineering constructs for producing transgenic mice will be favored. Position will begin on or around September or October 1, 1994. Salary will be commensurate with qualifications and experience. Send curriculum vitae, a brief description of prior research and the names of three references to: **Dr. Eugene E. Emeson, University of Illinois at Chicago, College of Medicine, Department of Pathology (M/C 847), 1819 West Polk Street, Chicago, IL 60612-7309.** *University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL FELLOWSHIP, MOLECULAR AND DEVELOPMENTAL NEUROBIOLOGY.** Two positions are available now to investigate the molecular mechanisms underlying axonal pathfinding by neuronal growth cones. Receptor- and G protein-dependent systems will be examined by expression cloning, site-directed mutagenesis, neuronal culture, and gene knockout techniques. Experience in molecular and cell biology preferred. Send curriculum vitae and names of three references to: **Stephen M. Strittmatter, M.D./Ph.D., Departments of Neurology and Neurobiology, Yale University School of Medicine, P.O. Box 208018, New Haven, CT 06520.** FAX: 203-785-5098.

**POSTDOCTORAL/RESEARCH ASSOCIATE POSITION** to study the structure/function of ion channels and receptors, particularly neuronal nicotinic receptors. Applicant should be experienced in molecular biology or electrophysiology. Salary commensurate with experience. Send résumé (including telephone number) to: **Dr. Bruce Cohen, Biomedical Sciences, University of California, Riverside, CA 92521.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** focused on gene regulation in mammalian muscle development. Projects include (1) genetic engineering/homologous recombination of muscle stem cells to study cell surface receptors, adhesion or signal transduction molecules, (2) regulation of gene expression for gene therapy, (3) characterization of the mechanism of action of untranslated RNAs with a role in growth control and tumor suppression. Applicants should send curriculum vitae, three recommendation letters and a one-paragraph description of research interests to: **Dr. Helen Blau, Department of Molecular Pharmacology, Stanford University School of Medicine, Stanford, CA 94305-5332.** *Equal Opportunity Employer/Affirmative Action.*

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATES

Two outstanding young Ph.D. **SCIENTISTS** with significant experience in molecular and cell biology are needed for innovative mechanistic research on (a) regulation and expression of novel P450 cytochromes in mammary cell types in relation to growth, differentiation, and cancer; and (b) characterization and expression of factors regulating steroid biosynthesis. Send curriculum vitae to: **Colin Jefcoate, Ph.D., Department of Pharmacology, University of Wisconsin Medical School, 1300 University Avenue, Madison, WI 53706.**

### POSTDOCTORAL POSITION RADIOBIOLOGY OF ELECTROMAGNETIC FIELDS

**POSTDOCTORAL POSITION** available December 1, 1994, in the Radiobiology Laboratory at the Johns Hopkins Oncology Center. Applicant should possess a background that includes molecular/cellular biology but with adequate training in physics or biophysics. The successful candidate will become part of a diverse team of scientists evaluating possible biological effects of electromagnetic radiations at the cellular/molecular level.

Applicants should send or FAX curriculum vitae, description of research interests and names of three references to: **William L. Clark, Ph.D., Program Manager, Radiobiology Laboratory, Johns Hopkins Oncology Center, 600 North Wolfe Street, Room 2-121, Baltimore, MD 21287-5001.** Telephone: 410-955-8777. FAX: 410-955-8780. *The Johns Hopkins University School of Medicine is an Equal Opportunity Employer.*

### POSTDOCTORAL POSITION

Available to investigate genes involved in nervous system development using transgenic mouse and embryonic stem cell technologies. Expertise in neuroscience, cell biology or molecular biology required. Please send application with curriculum vitae and three references to: **Dr. Claudia Kappen, Department of Biochemistry and Molecular Biology, Mayo Clinic, 13400 East Shea Boulevard, Scottsdale, AZ 85259, USA.** Email address: kappen@mayo.edu.

**POSTDOCTORAL POSITION** is available immediately to study function of the *Drosophila* gene *trithorax* (Development, 120: 1907-1917, 1994) and its human homologue *ALL-1* (Cell, 71: 691-708, 1992). Experience in molecular biology and/or genetics is required. Send curriculum vitae and names of three references to: **Dr. Alexander Mazo, Department of Microbiology and Immunology, Thomas Jefferson University, Room 485, JAH, 1020 Locust Street, Philadelphia, PA 19107.** FAX: 215-923-7144. *We are an Equal Opportunity Employer committed to a smoke-free work environment.*

### POSTDOCTORAL POSITION

Available immediately, to characterize the expression and regulation of molecules which mediate invasion of ovarian cancer cells through the extracellular matrix. Knowledge of molecular and cell biological techniques is required. Ultimate goal will be to determine the *in vivo* relevance of molecules such as matrix metalloproteinases in a nude mouse model of ovarian cancer metastasis. Send curriculum vitae and three letters of recommendation by October 31, 1994, to: **Dr. Stephen A. Cannistra, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available to study the antibiotic bicyclomycin on rho transcription termination factor in *E. coli*. Site-directed and random mutagenesis, construction of overexpression strains and the isolation and characterization of altered rho proteins is required. Send curriculum vitae and three letters of recommendation to: **Dr. William R. Widger, Department of Biochemical and Biophysical Sciences, University of Houston, Houston, TX 77204-5934.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately in laboratory studying the role of the inositol phosphate cascade in visual transduction. Experience using single-cell electrophysiological techniques is preferable. Applicants should forward curriculum vitae, description of previous research experience and names of three references to: **Dr. Alan Fein, Department of Physiology, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030 MC 3505.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION

This position will investigate viral hepatitis and liver cancer. Experience in molecular biology or cellular immunology is preferred.

Qualified applicants should submit curriculum vitae and three professional letters of reference to: **University of Texas Medical Branch, Department of Pathology, Attention: Dr. Chiaho Shih, Galveston, Texas 77555-0605.**

*The University of Texas Medical Branch (UTMB) is an Equal Opportunity/Affirmative Action Employer. Male/Female/Disabled/Veteran. UTMB is a smoke-free/drug-free work place. UTMB hires only individuals authorized to work in the United States.*

**POSTDOCTORAL POSITION.** Position open to study mechanisms of spontaneous and chaperonin-assisted protein folding and assembly. Research emphasizes the development and use of novel optical spectroscopic techniques to study the evolution of secondary and tertiary structure during folding and to characterize intermediates in this process. Experience in protein chemistry/biophysics is desired. Send updated curriculum vitae and three letters of reference to: **Ari Gafni, Biological Chemistry, University of Michigan, 300 North Ingalls, Ann Arbor, MI 48109-2007.** *An Affirmative Action/Equal Opportunity Employer.*

### RESEARCH ASSOCIATE DIVISION OF TUMOR IMMUNOLOGY Dana-Farber Cancer Institute

**A POSTDOCTORAL RESEARCH ASSOCIATE POSITION** is available immediately to study the T cell surface molecules (CD26, CD27 and VLA/CD29, etc.) and related signaling events. Experience in molecular biology and/or biochemistry is required. However, an immunology background is not required. Excellent collaborative opportunities exist. Send a curriculum vitae and three references to: **Dr. Chikao Morimoto, Division of Tumor Immunology, Dana-Farber Cancer Institute, Harvard Medical School, 44 Binney Street, Boston, MA 02115.** *Dana-Farber Cancer Institute is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION, SEATTLE

Available immediately to study plant mitochondrial genome replication using pulsed-field gels and DNA movies. (See *Current Genetics*, 17: 421, 1990 and 24: 279, 1993, and *Protoplasma*, 160: 121, 1991.) Send résumé and three reference letters to: **Arnold Bendich, Botany KB-15, University of Washington, Seattle, WA 98195.** *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION

Available immediately in basic cardiac electrophysiology. Research is focused on cardiac ion channel physiology and will be an integral part of ongoing research in cardiac arrhythmias. Background in basic electrophysiology is essential and knowledge in patch clamp methodology is preferred. Send curriculum vitae and names of references to: **Dr. Ruey Sung, Director, Cardiac Electrophysiology and Arrhythmia Service, Stanford University Hospital, H2146, Stanford, CA 94305.**

**POSTDOCTORAL POSITION** for studies of mouse T lymphocyte subsets, their activation requirements, and their patterns of lymphokine secretion, with emphasis on aging and T cell memory. A strong background in immunology is required. Send curriculum vitae, a brief statement of research interests, and names and telephone numbers of three references to: **Richard A. Miller, University of Michigan, Box 2007, 300 North Ingalls Street, Ann Arbor, MI 48109.** *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION**, available immediately, to study regulation of gene expression/drug metabolizing enzymes/determinants of cellular sensitivity to anticancer agents. Highly desired qualifications include Ph.D. and experience in molecular biology, enzymology, and cell culture. Send curriculum vitae and names, addresses and telephone numbers of three references to: **Dr. N. E. Sladek, Department of Pharmacology, 3-249 Millard Hall, University of Minnesota, Minneapolis, MN 55455.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*





• U.S. GOVERNMENT •

## FOOD AND DRUG ADMINISTRATION PHARMACOLOGIST/TOXICOLOGIST

Review Scientist positions are available in the Center for Drug Evaluation and Research, U. S. Food and Drug Administration, Rockville, MD. As a part of a multidisciplinary scientific team, the scientists review and evaluate the results of studies submitted in support of New Drug Applications (NDA), Investigational New Drug Applications (IND), and amendments, to assess the safety of the drug, based on experiments conducted by the investigator. Review of the data includes evaluation of the quality and adequacy of testing to ensure that the studies support the manufacturers' claims for safety. Review recommended dosage levels to determine margin of safety for clinical use. Prepare comprehensive summaries of the data reviewed, and submit recommendations and conclusions for approval.

**QUALIFICATIONS:** Specific course work in the field of study and professional experience or directly related postgraduate education is required. A doctoral degree in the field of pharmacology or toxicology is highly desirable. Professional postgraduate experience in dermal and/or ocular acute, subchronic and chronic toxicity studies is desired for a position in our Division of Topical Drug Products.

Candidates for Civil Service or Commissioned Corps appointments must be U.S. citizens. Candidates for Staff Fellowships may be either U.S. citizens or resident aliens eligible for citizenship within four years.

**SALARY:** Civil Service salary range for GS-12 through GS-13 is \$42,003 to \$64,928. Salary, benefits, and level of responsibility are commensurate with education and experience.

**HOW TO APPLY:** Interested candidates should send a cover letter referring to position code SRC185, an Application for Federal Employment (SF-171), and/or detailed Curriculum Vitae along with a copy of college transcripts to:

**DHHS/PHS/Food and Drug Administration**  
Center for Drug Evaluation and Research  
5600 Fishers Lane; Room 11B-22; HFD-505  
Rockville, MD 20857  
Attention: Recruitment Staff

FDA IS AN EQUAL OPPORTUNITY EMPLOYER AND HAS A  
SMOKE FREE ENVIRONMENT

Cadus Pharmaceutical Corporation is a rapidly growing biopharmaceutical company pioneering the discovery of drugs which regulate G protein-mediated signalling pathways in the areas of inflammation, cardiovascular and neurological disorders. We presently seek highly motivated scientists with a proven track record at all levels to accelerate the development of our yeast based screening programs.

## SCIENTISTS

### Receptor Biochemist:

Ph.D. level scientist with 5-7 years experience in the area of biology and biochemistry of

transmembrane receptors. Training in pharmacology and receptor biochemistry is essential; experience in molecular biology is preferred. Strong management and communication skills (verbal and written) required. **Job code: S-RB**

### Receptor cDNA Cloning:

Ph.D. level scientist with minimum 4 years post-graduate experience and

proven track record, to participate in efforts to identify and clone novel G-coupled signal transduction components. Specific expertise in cDNA cloning and expression technologies essential. **Job code: S-RC**

### Cell Biologist:

Ph.D. level scientist with minimum 4 years experience in studies on the cellular basis of receptor mediated signal transduction in mammalian systems. Training in molecular biology is essential; experience in assay development is preferred. Strong verbal and written communication skills required. **Job code: S-CB**

### RESEARCH SCIENTIST DNA Sequencing:

BS/MS with minimum 3 years experience with automated and manual DNA sequencing systems. Strong management and communication skills required. Will coordinate and manage DNA sequencing facility. **Job code: S-DNA**

## ASSOCIATE RESEARCH SCIENTISTS

### Biochemistry:

BS/MS level scientist with minimum 3 years experience in protein analysis and biochemistry. Experience in Western blot, ligand binding and cellular localization analyses is preferred. **Job code: S-B**

### Molecular Biology:

BS/MS level scientist with minimum 2 years laboratory experience in molecular biology. Expertise in DNA cloning and gene expression (yeast and mammalian) is essential, with expertise in protein analysis preferred. **Job code: S-MB**

### Yeast Genetics:

BS/MS level scientist with minimum 2 years experience in yeast genetics and/or molecular biology to aid in the development and adaptation of novel yeast strains to high throughput screening format. **Job code: S-YG**

### Screening:

BS level scientist with experience in the design or development of high throughput screens, operation of BioMek or other robotic systems and/or management of compound libraries. **Job code: S-S**

Cadus offers competitive salaries and benefits as well as excellent opportunity for career growth in a stimulating, collaborative environment. Send CV and a list of references to: Science Search, Cadus Pharmaceutical Corporation, 180 Varick Street, 9th floor, New York, NY 10014. Please indicate job code on envelope. Cadus is an equal opportunity employer.

**CADUS**  
PHARMACEUTICAL CORPORATION

## POSITIONS OPEN

**POSTDOCTORAL POSITIONS: CELL AND MOLECULAR BIOLOGY.** Postdoctoral research positions are available to study: (1) Endocrine regulation of liver cytochrome P450 gene transcription and (2) Gene therapy applications in cancer pharmacology. Strong research experience in molecular biology, cell biology or biochemical pharmacology is essential. Flexible start date. *Minority candidates are encouraged to apply.* Send curriculum vitae with brief summary of research experience, copies of select publications, and names of three references to: **Dr. David J. Waxman, Professor of Cell and Molecular Biology, Department of Biology, Boston University, 5 Cummings Street, Boston, MA 02215.**

**POSTDOCTORAL POSITIONS** available to study genes that determine the yeast replicative life span, their human homologs and age-responsive promoter elements. (*Genetica*, 91: 35, 1993; *J. Biol. Chem.*, 269: 15451, 1994; *J. Biol. Chem.*, 269: 18638, 1994.) Experience in molecular techniques essential and in yeast genetics helpful. Send curriculum vitae with bibliography and names, telephone numbers, and FAX numbers of three references to: **Dr. S. M. Jazwinski, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION**, available immediately, to study an adhesive multicomponent system expressed by an enterobacterial pathogen. Requires experience in molecular genetics (bacterial genetics, recombinant DNA, mutagenesis, PCR). Experience in protein purification and use of antibody probes is desirable. Send curriculum vitae, description of previous experience and references to: **Dr. Dieter M. Schifferli, University of Pennsylvania, Department of Pathobiology, 3800 Spruce Street, Philadelphia, PA 19104-6049. FAX: 215-898-7887. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITIONS** available. NIH- and Veterans Administration-funded. In cellular molecular biology/genetics. Projects include: (i) linkage analysis (*Arch. Derm.*, 130:216, 1994); (ii) positional cloning (*Genomics*, 21:359, 1994); and (iii) cellular function tumor suppressor genes (*PNAS*, 89:2504, 1992). Send curriculum vitae and references to: **Dr. James Elder, University of Michigan, C560A MSRB II Box 0672, Ann Arbor, MI 48109-0672. FAX: 313-763-4575. The University of Michigan is an Equal Opportunity Employer.**

### POSTDOCTORAL FELLOW

Immediate opening. **Dr. A. Vania Apkarian** of the Computational Neuroscience Program at State University of New York (SUNY) Health Science Center at Syracuse and Syracuse University seeks a **POSTDOCTORAL FELLOW** to work within the Neurosurgery Research Labs at SUNY Health Science Center at Syracuse. Applicants should have a Ph.D. in a neuroscience-related discipline. The fellow will participate in Functional MRI studies of brain representation of acute and chronic pain. Must be U.S. citizen. Send résumé to: **A. Vania Apkarian, Ph.D., State University of New York Health Science Center at Syracuse, Neurosurgery Labs, 750 East Adams Street, Syracuse, NY 13210. Affirmative Action/Equal Opportunity Employer.**

**ECOLOGIST.** Tenure-track position in zoology or botany for **ECOLOGIST** preferably in the fields of marine and/or freshwater ecosystems or in botany. Emphasis on ecosystem processes and nature conservation aspects. Candidates with at least one year of postdoctoral experience should submit curriculum vitae and a list of publications and should request three letters of reference to be sent to: **Professor A. Gasith, Institute for Nature Conservation Research, Tel-Aviv University, Ramat-Aviv 69978 Israel, not later than September 15, 1994.**

**SCIENTIFIC ANALYST.** Available immediately. Position involves systematic evaluation of potential business opportunities, including comprehensive reviews of medical/biological literature and discussions with leading scientists. M.D., M.S., or Ph.D. degree in biological science with strong background in molecular biology required. Salary: \$30,000 to \$50,000 plus bonus and benefits. Medical Portfolio Management is an investment firm focusing in the area of biotechnology. Mail a cover and résumé to: **Dr. Ansbert S. Gadick, Managing Director, Medical Portfolio Management, One Cambridge Center, Cambridge, MA 02142. FAX: 617-225-0036.**

## POSITIONS OPEN

### ANIMAL ECOLOGIST/EVOLUTIONARY BIOLOGIST

University of Connecticut at Waterbury

The Department of Ecology and Evolutionary Biology seeks candidates for an anticipated tenure-track position at the Waterbury Regional Campus beginning September 1995. Duties include teaching lectures and laboratories in introductory biology for majors, nonmajors, and other undergraduate courses as appropriate. Teaching loads are about 12 hours per week. Requirements: Ph.D. and strong teaching commitment, with ability to develop a program of research at the regional campus in ecology, behavior, evolution, systematics, or conservation biology. Send curriculum vitae, statement of teaching and research interests, reprints, and three letters of recommendation to: **Dr. Frederick Streams, Chair, Search Committee, Department of Ecology and Evolutionary Biology, University of Connecticut, U-42, 75 North Eagleville Road, Storrs, CT 06269-3042.** Screening of applications will begin October 15, 1994, and continue until the position is filled. *We encourage applications from underrepresented groups, including minorities, women and people with disabilities.* (Search #A4380)

**LECTURER IN BOTANY** from January 1995 to May 1996. Seeking Ph.D. or ABD to teach plant biology and an advanced course in specialty. Applications must be received by October 3, 1994. Send application letter stating teaching interests, curriculum vitae, undergraduate and graduate transcripts, up to three publications, and three reference letters to: **Botanist Search Committee, Department of Biology, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004. Internet: B10LSRCH@UWEC.EDU. Telephone: 715-836-4166; FAX: 715-836-2380. University of Wisconsin-Eau Claire is an Affirmative Action/Equal Opportunity Employer. Applications from women and persons of color are particularly welcomed.**

### SYSTEMATIC BOTANY

The Field Museum is seeking an outstanding **SYSTEMATIC BOTANIST** for a career-track appointment in the Department of Botany at the level of **ASSISTANT CURATOR**. Candidates pursuing innovative specimen-based research in macrofungi, including lichens, bryophytes, pteridophytes or angiosperms, and who are also making important contributions in a second field such as conservation, ethnobotany, theoretical systematics, developmental biology or population genetics, will be given special attention. In addition to research, responsibilities include curation of relevant collections and participation in public education and exhibit programs. The successful candidate will have a Ph.D., a proven record of scientific achievement and the ability to establish an externally funded research program. Curators teach at local universities and there are opportunities for participating in undergraduate and graduate training.

The Botany Department is part of the Museum's Center for Evolutionary and Environmental Biology, which includes the departments of Geology and Zoology. Facilities include over 2.5 million botanical specimens (including one of the world's richest collections of neotropical plants), an outstanding library, and molecular systematics and biochemical laboratories. Consideration of applications will begin on October 17, 1994. Please submit curriculum vitae; a statement of research objectives; names, addresses and contact numbers of at least three references; and copies of relevant publications to: **Search Committee, Department of Botany, The Field Museum, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605-2496. Email: botany@fmnh.org. As an Equal Opportunity/Affirmative Action Employer, we especially encourage applications from women and minorities and we are responsive to dual-career needs.**

### MOLECULAR BIOLOGIST PROSTATE CANCER RESEARCH

The Division of Urologic Surgery at Washington University School of Medicine seeks a highly qualified **MOLECULAR BIOLOGIST** to join its multidisciplinary prostate cancer research team. This position requires a Ph.D.; postdoctoral experience desired. Salary and faculty appointment level will be competitive and dependent on experience. Please send curriculum vitae, statement of research interests, and three references to: **William J. Catalona, M.D., Professor and Chief, Division of Urologic Surgery, Washington University School of Medicine, 4960 Children's Place, St. Louis, MO 63110.**

## POSITIONS OPEN

### PLANT MOLECULAR SYSTEMATIST

The New York Botanical Garden invites applications for the position of **PLANT MOLECULAR SYSTEMATIST** in the Institute of Systematic Botany. Qualifications include a Ph.D. in Botany or Biology, demonstrated excellence in Molecular Systematics, a strong background in Plant Taxonomy, and several years of postdoctoral experience. The successful candidate will conduct research in botanical or mycological systematics with an emphasis on employing molecular techniques. Work will involve teaching and advising of students in the Garden's Graduate Studies Program, and publishing research results in peer-reviewed scholarly journals. The individual occupying this position will also be expected to secure grant funds and assist in other departmental and division-wide duties. This position begins April 1, 1995. Excellent benefits. To apply submit a letter stating research interests and goals, curriculum vitae, and the names of three references to: **Personnel Manager-MS, The New York Botanical Garden, 200th Street and Southern Boulevard, Bronx, New York 10458-5126, USA. FAX: 738-220-6504. Affirmative Action/Equal Opportunity Employer/Male/Female/Disabled/Veterans.**

### SENIOR ANIMAL RESEARCH TECHNICIAN

Available immediately in a laboratory actively engaged in the development of new drugs and therapeutic strategies for the treatment of solid tumors. Applicants should be well versed in all aspects of small animal handling, drug administration and survival surgery. Responsibilities include maintenance and injection of murine and human cell lines; *in vivo* design and administration of treatment regimens to assess antitumor activity of various chemotherapeutic agents. This may include p.o., i.v., i.p., and s.c. administration, blood sampling, and simple surgery. Work in an AAALAC accredited facility.

This position requires a highly self-motivated individual with the ability to work independently as part of a multidisciplinary research team. B.S. in Biology/Laboratory Animal Science preferred.

Send curriculum vitae and the names, addresses and phone numbers of three references to:

**Dr. Beverly A. Teicher  
Dana-Farber Cancer Institute  
44 Binney Street  
Boston, MA 02115**

*An Equal Opportunity/Affirmative Action Employer.*

### CHEMICAL MIXTURES AND QUANTITATIVE RISK ASSESSMENT

The Second Annual Symposium of the Health Effects Research Laboratory will be held November 7 to 10, 1994, at the North Raleigh Hilton in the vicinity of Research Triangle Park, North Carolina. The focus will be recent progress in chemical mixtures research, emphasizing advances in mechanistic understanding. Topics for discussion include current risk assessment guidelines and practices; experimental approaches, methods, and models to evaluate mixtures; and pharmacokinetic and pharmacodynamic interactive mechanisms. The purpose is to identify critical data needs and important future research directions and to promote active dialogue on the role of mechanistic research on chemical mixtures in future risk-assessment strategies. For more information, please contact:

**RSD Conference Coordinator  
MD-70, Health Effects Research Laboratory  
United States Environmental Protection Agency,  
Research Triangle Park, NC 27711  
Telephone: 919-541-5193. FAX: 919-541-4002.  
Internet: meeting@mail@herl45.herl.epa.gov.**

**CHEMICAL/BIOLOGICAL ENGINEER** to direct research efforts for the intravenous membrane oxygenator development program at the University of Pittsburgh. M.S. or Ph.D., minimum of three years of experience working in biomedical product development required, with expertise in membrane oxygenator technology or respiratory physiology desired. Open rank, full-time, non-tenured stream, proposed start date: October 1, 1994. Closing date for applications: September 15, 1994. Salary commensurate with experience. Send letter of application with salary requirements, curriculum vitae, and list of references to: **Madeline C. Cindrich, University of Pittsburgh, Department of Surgery, P.O. Box 7533, Pittsburgh, PA 15213. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.**



**UIC** The University of Illinois  
at Chicago

**DEPARTMENT HEAD  
DEPARTMENT OF BIOLOGICAL SCIENCES**

Applications and nominations are being sought for the position of Head of the Department of Biological Sciences at the University of Illinois at Chicago. The Head is the chief administrative officer of the Department, with overall responsibility for instruction, budget, promotion, and faculty and staff recruitment. The Head is expected to provide strong leadership for the department in our continued development of research, teaching, and public service programs.

The Department of Biological Sciences consists of 37 faculty, over 120 graduate students and approximately 800 undergraduate majors. Major subdivisions of the Department include cell and developmental biology, ecology and evolution, molecular biology, neurobiology and plant biology. Located in the heart of Chicago, UIC enrolls 16,000 undergraduate, 5,000 graduate, and 3,000 professional students. Biological Sciences is a particularly well funded department within UIC's Research I environment.

The successful candidate will have an earned doctorate and be eligible for appointment at the rank of full professor. A strong record in research and university teaching, a demonstrated commitment to equality of opportunity, and substantial leadership and organizational skills are required. Women and minority candidates are especially encouraged to apply. The desired appointment date is August 21, 1995.

Applications should be received by September 15, 1994 to receive full consideration, although the search will proceed until the position is filled. Materials, including a full curriculum vitae and names and addresses of four references, should be directed to:

**Professor Brian Nichols**  
Biological Sciences Search Committee  
c/o College of Liberal Arts and Sciences, m/c 228,  
The University of Illinois at Chicago  
601 South Morgan Street  
Chicago, Illinois 60607-7104  
*UIC is an Affirmative Action/  
Equal Opportunity Employer.*

**GLAXO, INC. and the UNIVERSITY OF NORTH CAROLINA  
announce the SIXTH ANNUAL  
"FRONTIERS IN CHEMISTRY AND MEDICINE SYMPOSIUM"**

**Sunday, 6:30 pm, November 6–Tuesday, Noon, November 8, 1994  
Friday Continuing Education Center, University of North Carolina at Chapel Hill**

Following are the distinguished GUS '94 presenters

**Prof. Jeremy Berg**  
Biophysics & Biophysical Chemistry  
Johns Hopkins University

**Dr. Kary B. Mullis**  
Nobel Laureate—Chemistry

**Prof. Andrew G. Myers**  
Dept. of Chemistry  
California Institute of Technology

**Prof. Larry Overman**  
Dept. of Chemistry  
Univ. of California—Irvine

**Prof. Don C. Wiley**  
Dept. of Biochemistry  
Harvard University

**Prof. Chi-Huey Wong**  
Dept. of Chemistry  
Scripps Research Institute

**Prof. Harry Noller**  
Center for Molecular Biology of RNA  
Sinsheimer Laboratories  
Univ. of California—Santa Cruz

*Early registration is suggested as space is limited.  
Please send your name, address, affiliation and  
phone number along with the appropriate fees.*

Registration*	\$25.00
Registration* & Banquet	\$60.00
Student Registration*	\$10.00
Student Registration* & Banquet	\$30.00
*Lunch is included	

**SEND TO:**  
Ms. Becky Smith  
Symposium Coordinator/UNC  
CB #3290  
UNC-Chapel Hill  
Chapel Hill, NC 27599-3290

**FOR ADDITIONAL INFORMATION CALL**  
919-962-2172 Becky Smith, Symposium Coordinator—UNC  
919-783-0165 Wanda Satterwhite (Satterwhite Management Services)—Glaxo Rep.



**SAMUEL LUNENFELD RESEARCH INSTITUTE  
MOUNT SINAI HOSPITAL  
TORONTO, CANADA**

The Samuel Lunenfeld Research Institute is looking for scientists to work on independent research projects as part of well-established, interactive groups. Preference will be given to junior investigators, although outstanding candidates at any level are invited to apply. Cross-appointment to an appropriate department of the University of Toronto will be available.

**▲ Molecular Biologist**

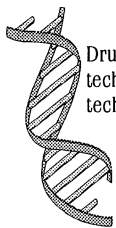
Within the Molecular Biology & Cancer program, you will work on some broad aspects of the molecular control of signal transduction or the cell cycle, joining a group of five laboratories with interests in protein-tyrosine kinase signalling pathways, the genetics of signal transduction, oncogenes and tumor suppressor genes, and lymphoid cell differentiation and function. You will benefit from an informal network of laboratories in Toronto interested in the genetics, biochemistry and structure of signalling molecules. Responses are to be forwarded to: **Dr. Tony Pawson, Chair, Search Committee in Molecular Biology, Samuel Lunenfeld Research Institute, Room 875**, at the address below. Further information can be requested by email: Pawson@mshri.on.ca.

**▲ Developmental Biologist**

This group, involved in mammalian development, axon guidance in *C. elegans* and maternal-fetal interactions within the Development & Fetal Health program, is looking for an individual working on the cellular, molecular or genetic basis of embryonic development in any well-studied organism. The successful candidate will benefit from the new interdepartmental program in Development Biology at the University. Appropriate replies should be sent to: **Dr. J. Rossant, Chair, Search Committee in Developmental Biology, Samuel Lunenfeld Research Institute, Room 884**, at the address below. Fax: (416) 586-8588. Further information can be requested by email: Rossant@mshri.on.ca.

Applicants should include a brief statement of research interests and the names of three referees, by **October 1, 1994**, c/o: Mount Sinai Hospital, 600 University Avenue, Toronto, Ontario, Canada, M5G 1X5.

## DIRECTOR OF COMBINATORIAL CHEMISTRY DISCOVERY



Drug discovery at Isis Pharmaceuticals exploits two fundamental technologies. The company's major focus is on antisense technology, the inhibition of gene expression by modified oligonucleotides. The second and complementary technology at Isis is combinatorial drug discovery. Isis currently has two drugs in clinical trials. ISIS 2105 is an antisense compound in Phase II designed to prevent the growth of certain strains of human papillomavirus. ISIS 2922, an antisense drug which prevents the growth of human cytomegalovirus (CMV), is in Phase I/II clinical trials. Isis has four compounds in preclinical development, the most advanced of which are an HIV compound discovered through the combinatorial program, and an inhibitor of ICAM-1.

In order to continue our development in this area, we are seeking a director-level scientist who will manage our combinatorial drug discovery approach. The successful candidate will be a seasoned manager who works well in a highly matrixed, cross-functional team environment. The candidate will have earned a Ph.D. in synthetic and/or medicinal chemistry, and will have had major pharmaceutical drug discovery experience and an extensive publication record. The director will manage a cross functional team currently consisting of thirteen scientists (seven Ph.D.s). Experience in anti-bacterials will be highly desirable.

Based in north San Diego County, Isis offers competitive salaries and excellent benefits including equity participation. Interested candidates should send cover letter and CV to: **Isis Pharmaceuticals, Attn: HR Dept, Code 151, 2292 Faraday Ave., Carlsbad, CA 92008.** EOE. No phone calls, please.



**ISIS PHARMACEUTICALS**

## BROOKHAVEN NATIONAL LABORATORY

### ASSISTANT SCIENTIST and POSTDOCTORAL RESEARCH ASSOCIATE

#### Chemistry Department

#### High-Field Magnetic Resonance Imaging (MRI)

The new High-Field MRI Laboratory of the Brookhaven Center for Imaging and Neuroscience expects to have two positions open beginning 15 November 1994. One position will be at the level of Assistant Scientist and the other at the level of Postdoctoral Research Associate.

Persons filling these positions will be responsible for bringing into operation and maintaining a new 4-Tesla human MR instrument and collaborating with Brookhaven National Laboratory staff members on on-going *in vivo* MR and PET projects. The Assistant Scientist will also have the opportunity to develop an independent research program. The successful candidates must each hold a PhD degree involving NMR research, and, in the case of the Assistant Scientist, 1-3 years' postdoctoral experience in *in vivo* MR research.

Applicants should send curriculum vitae, and arrange to have three letters of reference sent by 30 September 1994 to: Dr. Charles S. Springer, Jr., Chemistry Department, Brookhaven National Laboratory, Upton, Long Island, NY 11973-5000. Equal Opportunity Employer m/f/d/v.



**BROOKHAVEN  
NATIONAL LABORATORY  
ASSOCIATED UNIVERSITIES, INC.**  
*on the frontier of science and technology*

## SCIENTIST

Molecular Biosystems, Inc (MBI) a Southern California based pharmaceutical company, is a leader in the development and production of contrast agents for medical imaging.

MBI is seeking a team-oriented Scientist who will be responsible for manufacturing technical support and troubleshooting, as well as characterization and development of analytical methods for novel ultrasound imaging products.

The successful candidate will have a PhD in Biochemistry, Bioanalytical Chemistry or equivalent experience, with 6 years experience in protein characterization and assay development. Experience in cleanroom environment, pharmaceutical manufacturing and regulatory compliance is preferred.

Interested and qualified candidates should send resume and salary requirement to:

**MBI, HR Dept A27-95,  
10030 Barnes Canyon Road,  
San Diego, CA 92121.**



*Equal Opportunity Employer*

## PROVOST NAVAL POSTGRADUATE SCHOOL Monterey, California

The Naval Postgraduate School is seeking to fill the position of Provost. The School provides fully accredited graduate level education for Naval officers as well as officers and government civilians of other services and nations. It awards annually approximately 800 Masters' degrees in 37 curricula, plus a number of Doctorates, has more than 300 full-time faculty and is located on a 5 site, 600 acre campus adjacent to Monterey Bay.

The Provost is the principal academic officer at the School, and reports directly to the Superintendent, a Navy Rear Admiral. He or she is responsible for administering the academic and research programs, and must establish and maintain strong linkage through the highest levels of the Navy and the Defense Department. Additionally, the Provost is the principal liaison between the School and other universities. As leader of and in consultation with the faculty, the Provost develops and implements a long term strategic plan for the School. He or she is responsible for seeing that an effective administration structure is in place to realize the School's vision. Ideally, candidates will have significant executive leadership experience in academia and within the Government and have an earned Doctorate.

Applications, including a current resume, the names, addresses and phone numbers of three references will be accepted until 15 September 1994, should be submitted to:

Dean Paul J. Matro  
Naval Postgraduate School  
589 Dyer Road, Building 235  
Monterey, California 93943-5138  
Telephone: (408) 656-2098

*The Naval Postgraduate School is an Equal  
Opportunity, Affirmative Action employer.*

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Research opportunities in four areas: observations and data management; process research (including studies of physical, geological, chemical, biological, economic, and social processes); integrated modeling and prediction; and integrated assessments.

- U.S. citizens and permanent resident aliens
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- Stipend: \$35,000
- Deadline: December 15, 1994

For application materials contact:

Global Change Postdoctoral Fellowships  
Science/Engineering Education Division  
Oak Ridge Institute for Science and Education  
P.O. Box 117  
Oak Ridge, TN 37831-0117  
(615) 576-9934



# 1995 KEYSTONE SYMPOSIA *on Molecular and Cellular Biology*

PLEASE NOTE THAT THE NUMBER FOLLOWING THE TITLE INDICATES THE MAXIMUM ATTENDANCE FOR EACH CONFERENCE.

**Application/Abstract Deadline: Sept. 7, 1994**

**Oncogenes: 20 Years Later — 750**  
Organizers: *Inder M. Verma and Peter Vogt*  
January 5-11, 1995; Keystone, Colorado

**Bacterial Chromosomes — 300**  
Organizers: *Nancy Kleckner and John Roth*  
January 6-12, 1995; Santa Fe, New Mexico

**Plant Cell Biology: Mechanisms, Molecular Machinery, Signals and Pathways — 500**  
Organizers: *Natasha V. Raikhel and Christopher J. Lamb*  
January 7-13, 1995; Taos, New Mexico

**Drug Delivery: Barriers to Drug Transport and the Design of Novel Therapeutic Agents — 350**  
Organizers: *W. Mark Saltzman and Rakesh K. Jain*  
January 7-13, 1995; Hilton Head Island, South Carolina  
SPONSORED BY AMGEN, INC.

**Molecular Toxicology — 300**  
Organizers: *Spencer Farr and Armen Tashjian*  
January 9-15, 1995; Copper Mountain, Colorado

**Ribozymes: Basic Science and Therapeutic Applications — 400**  
Organizers: *Thomas R. Cech, Christine Guthrie and J. Joseph Marr*  
January 15-21, 1995; Breckenridge, Colorado  
SPONSORED BY WARNER-LAMBERT CO. AND THE DIRECTOR'S SPONSORS FUND

**Mucosal Immunity: New Strategies for Protection Against Viral and Bacterial Pathogens — 200**  
Organizers: *Marian R. Neutra, Jiri Mestecky, Jean-Pierre Kraehenbuhl and Jan Holmgren*  
January 16-23, 1995; Keystone, Colorado  
SPONSORED BY IMMUNEX CORP. AND THE DIRECTOR'S SPONSORS FUND

**Molecular Aspects of Viral Immunity — 400**  
Organizers: *Carol S. Reiss, Barry T. Rouse, Rafi Ahmed, Peter C. Doherty, and Thomas J. Braciale*  
January 16-23, 1995; Keystone, Colorado  
SPONSORED BY IMMUNEX CORP. AND THE DIRECTOR'S SPONSORS FUND

**Genetic Networks — 350**  
Organizers: *William F. Loomis, Lee Hartwell and Paul Sternberg*  
January 20-26, 1995; Santa Fe, New Mexico

**Application/Abstract Deadline: Sept. 28, 1994**

**Cancer Cell Invasion and Motility — 300**  
Organizers: *Garth L. Nicolson and Lance A. Liotta*  
February 5-11, 1995; Tamarron, Colorado

**The Molecular Basis for Differences Between the Sexes — 300**  
Organizers: *Bruce S. Baker, Barbara J. Meyer and Robin Lovell-Badge*  
February 12-18, 1995; Tamarron, Colorado

**Molecular Mechanisms in Tuberculosis — 300**  
Organizers: *Gilla Kaplan and Patrick J. Brennan*  
February 19-25, 1995; Tamarron, Colorado  
SPONSORED BY ABBOTT LABORATORIES AND THE DIRECTOR'S SPONSORS FUND

**Molecular Motors — 200**  
Organizers: *David R. Burgess, Thomas Pollard, Winfield Sale and Leah Haimo*  
February 19-25, 1995; Taos, New Mexico

**Functions of the Cytoskeleton in Cell Growth, Organization and Differentiation — 300**  
Organizers: *Jeannette Chloe Bulinski and Kathleen Green*  
February 19-25, 1995; Taos, New Mexico

**Host-Fungus Pathogenic Interactions — 500**  
Organizers: *Donald Nuss and Yigal Koltin*  
February 25-March 3, 1995; Taos, New Mexico

**Synapse Formation and Function: The Neuromuscular Junction and Central Nervous System - II — 300**  
Organizers: *Miriam M. Salpeter and Darwin K. Berg*  
February 26-March 4, 1995; Tamarron, Colorado

**Heat Shock (Stress) Proteins in Biology and Medicine — 350**  
Organizers: *William J. Welch and Larry Hightower*  
February 27-March 5, 1995; Santa Fe, New Mexico

**Processing Enzymes: Biochemistry, Genetics and Clinical Relevance — 200**  
Organizers: *Nabil G. Seidah, Michel Chretien and Gary S. Jacob*  
March 2-8, 1995; Lake Tahoe, California

**Apoptosis (Programmed Cell Death) — 300**  
Organizers: *John A. Cidlowski and J. John Cohen*  
March 5-11, 1995; Tamarron, Colorado

**Molecular Approaches to Marine Ecology and Evolution — 300**  
Organizers: *Howard R. Lasker, Mary Alice Coffroth and Eldredge Bermingham*  
March 5-11, 1995; Santa Fe, New Mexico

**Discovery of Therapeutic Agents — 200**  
Organizers: *Barrie Hesp, Paul S. Anderson and Charles A. Harbert*  
March 9-15, 1995; Lake Tahoe, California  
SPONSORED BY ZENECA PHARMACEUTICALS GROUP

**Application/Abstract Deadline: Oct. 19, 1994**

**Dendritic Cells: Antigen Presenting Cells of T and B Lymphocytes — 500**  
Organizers: *Jacques Banachereau and Ralph Steinman*  
March 10-16, 1995; Taos, New Mexico

**Environmental Biotechnology — 225**  
Organizers: *James J. Valdes, Ananda M. Chakrabarty and Michael Bagdasarian*  
March 16-22, 1995; Lake Tahoe, California

**Control and Manipulation of the Immune Response — 500**  
Organizers: *Jacques F.A.P. Miller, Charles A. Janeway and Eli E. Sercarz*  
March 16-22, 1995; Taos, New Mexico  
SPONSORED BY GENENTECH, INC. AND SMITHKLINE BEECHAM PHARMACEUTICALS

**Toward the Genetic Manipulation of Insects — 400**  
Organizers: *Bruce M. Christensen, Nancy E. Beckage, Alexander S. Raikhel, Anthony A. James, Ann M. Fallon and Richard French-Constant*  
March 17-23, 1995; Tamarron, Colorado  
SPONSORED BY THE JOHN D. AND CATHERINE T. MACARTHUR FOUNDATION

**Metal and Oxygen Regulation of Gene Expression — 200**  
Organizers: *Anne O. Summers, Barry Rosen, Dennis Thiele, Tom Curran and Max Costa*  
March 18-24, 1995; Park City, Utah

**Repair and Processing of DNA Damage — 600**  
Organizers: *Errol C. Friedberg, Tomas Lindahl and Graham C. Walker*  
March 23-29, 1995; Taos, New Mexico  
SPONSORED BY GLAXO RESEARCH INSTITUTE

**Gene Therapy and Molecular Medicine — 500**  
Organizers: *Savio L.C. Woo, Michael Blaese and Joseph Glorioso*  
March 26-April 1, 1995; Steamboat Springs, Colorado  
SPONSORED BY WARNER-LAMBERT CO. AND THE DIRECTOR'S SPONSORS FUND

**Frontiers of Plant Morphogenesis — 250**  
Organizers: *Richard J. Cyr and Barry A. Palevitz*  
March 29-April 4, 1995; Hilton Head Island, South Carolina

**Signal Transduction in Plants — 450**  
Organizers: *Daniel F. Klessig and Winslow Briggs*  
March 29-April 4, 1995; Hilton Head Island, South Carolina

**Application/Abstract Deadline: Nov. 2, 1994**

**Science and Engineering of Immunoprotected Cell Transplants — 250**  
Organizers: *Michael Lysaght, Patrick Aebischer and Thomas Flanagan*  
April 2-8, 1995; Frisco, Colorado

**Frontiers of NMR in Molecular Biology - IV — 750**  
Organizers: *Stephen W. Fesik, Thomas L. James and Gerhard Wagner*  
April 3-9, 1995; Keystone, Colorado  
SPONSORED BY ABBOTT LABORATORIES AND THE DIRECTOR'S SPONSORS FUND

**The Molecular and Cellular Basis of Human Neurodegenerative Disease — 400**  
Organizers: *Sangram S. Sisodia and Samuel E. Gandy*  
April 3-9, 1995; Breckenridge, Colorado  
SPONSORED BY GENENTECH, INC. AND SMITHKLINE BEECHAM PHARMACEUTICALS

**The Nuclear Matrix: Involvement in Replication, Transcription, Gene Splicing and Cellular Regulation — 300**  
Organizers: *Ronald Berezney and Gary Stein*  
April 4-10, 1995; Hilton Head Island, South Carolina

**Epigenetic Regulation of Transcription — 400**  
Organizer: *Gordon Hager*  
April 4-10, 1995; Hilton Head Island, South Carolina

**HIV Pathogenesis — 600**  
Organizers: *Margaret Johnston and Warner Greene*  
April 17-23, 1995; Keystone, Colorado  
SPONSORED BY THE UPJOHN CO.

**Sexually Transmitted Diseases in the HIV Era — 200**  
Organizers: *Myron S. Cohen, Isa Mushahwar and Edward Hook III*  
April 17-23, 1995; Keystone, Colorado  
SPONSORED BY ABBOTT LABORATORIES

☐ Registration for a meeting in an outlined group qualifies for attendance in either meeting in that group.

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We seek a Research Scientist to work with a scientific programmer and provide general support for a high-throughput sequence analysis project. Research functions will include the establishment of new analyses and refining existing analyses with a goal of maximizing the signal-to-noise ratio. Candidate must have a Ph.D. in Molecular Biology or related field. Also requires knowledge of diverse gene families and genetic diseases, four years' experience with DNA and protein sequence analysis and comparison, familiarity with the concepts of relational databases, and at least 3 years' programming experience. Excellent communication skills with non-experts is essential. Familiarity with 4th Dimension for the Macintosh is desired. (Job Code: OA-SC-SC-004).

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Coordinate a wide variety of processes related to GMP production runs including ordering raw materials, issuing run schedules and documentation, and coordinating media and equipment preparation. You will also coordinate in-process sample submission and testing, equipment cleaning, and process documentation.

Requires a BA/BS in Life Sciences or Engineering, and 6 months to 2 years of relevant experience. Candidates should be detail-oriented team players with the ability to juggle multiple tasks, and a demonstrated interest in biotechnology. Ability to lift 75 lbs is essential. Knowledge of aseptic techniques, cGMPs, and the pharmaceutical industry is desired. Mac literacy is a plus. (Job Code: OA-SC-LD-010).

At Amgen, you'll find our approach to science as rewarding as it is effective. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center, and three weeks' vacation. Please FAX/mail your resume/c.v. to: FAX: (805) 447-1985, Amgen Inc., Staffing, Job Code (see above), Amgen Center, Thousand Oaks, CA 91320-1789. For additional information regarding Amgen's recruitment process, please call (805) 447-4150. Principals only, please. EEO-Affirmative Action Employer M/F/D/V. We recognize that diverse perspectives are a key factor in the process of discovery.



## POSTDOCTORAL/PROFESSIONAL RESEARCH FELLOWSHIPS DEPARTMENT OF PHARMACOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

Several Postgraduate Researcher positions are available in individual laboratories in the Department for candidates who have demonstrated research promise at the postdoctoral level. The emphasis of research in the Department is in the areas of neuropharmacology, cellular and molecular pharmacology, and cardiovascular pharmacology. The faculty of the Department and their research interests are:

Dr. Sue Duckles:	Vascular function: Age and gender
Dr. Fred Ehler:	Muscarinic receptors and their signaling mechanisms
Dr. Kelvin Gee:	Characterization of novel modulatory sites on GABAA receptor complex
Dr. Frances Leslie:	Drugs of abuse and cellular plasticity
Dr. Ralph Purdy:	Vascular 2nd messengers; vasoconstrictor synergism
Dr. Larry Stein:	Cellular basis of reward, learning & memory; behavioral pharmacology; drug discovery
Dr. Eckard Weber:	Novel NMDA antagonists; stroke therapy drugs

Applications or inquiries for additional information should be sent to: Dr. Larry Stein, Professor and Chairman, Department of Pharmacology, University of California, Irvine, 360 Med Surge II, Irvine, CA 92717-4625. UCI: rooted in education, enriched by diversity.

## SCIENTISTS — Ph.D.

LIGAND Pharmaceuticals, an acknowledged leader in the field of intracellular receptor technology, seeks to discover novel therapeutics for the treatment of human disease. LIGAND combines state-of-the-art screening technology with cutting-edge molecular biology to provide new avenues for drug discovery. Two Ph.D. positions are currently available:

### NEW LEADS DISCOVERY

Ph.D. in Pharmacology or Molecular Biology and 2-8 years of postdoctoral experience required. Individual will be responsible for developing new assays, as well as supervising BS/MS level staff. Experience in high through-put drug screening/assay development and molecular biology also required. Dept. MR

### APOLIPOPROTEIN EXPERT

Research Scientist with experience in the fields of transcription and apolipoprotein metabolism. This individual will be responsible for the molecular dissection of the role of apolipoprotein A1 in HDL metabolism as well as identifying novel targets for drug discovery. Dept. MB

LIGAND provides an exciting intellectual environment with modern research facilities in San Diego, an elite center for biomedical research. We offer a competitive salary and benefits package with stock options. Please submit your CV to: **LIGAND Pharmaceuticals, Human Resources, Dept. \_\_\_\_\_**, 9393 Towne Center Dr., San Diego, CA 92121; FAX: (619)535-3906. EOE.



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## OAK RIDGE ASSOCIATED UNIVERSITIES (ORAU)

### EXECUTIVE DIRECTOR ORAU - NSF FELLOWSHIP OPERATIONS (REFERENCE # 276-94)

Oak Ridge Associated Universities (ORAU) is seeking nominations and applications for the position of Executive Director of the ORAU staff responsible for the conduct of support operations for the National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP). The position will be in Oak Ridge, Tennessee. ORAU supplies the support services under a contract with the NSF, which prior to 1993, contracted with the National Research Council for the conduct of the program authorized in the NSF Act of 1950 (Section 10, 42 U.S.C. 1869, as amended). Under this authorization, NSF has awarded fellowships yearly since 1952, and in 1993-94 program cycle, over 1,100 fellowship awards for three-years of education in the sciences and engineering were made to outstanding U.S. citizens, nationals, or permanent residents.

ORAU's services include: preparation, printing, and distribution of program announcement and application materials (approximately 30,000); receipt and processing of applications for review and evaluation (approximately 10,000); nomination to NSF and upon approval, invitations to scholars in all of the eligible academic disciplines to serve as panelists for the review and rating of applicants (approximately 650 invited, 450 acceptances); logistic arrangements and conduct of the panel meetings (currently 19 panels meet in the Washington, DC area); processing results of panelists' ratings and reporting to NSF results by Quality Groups (NSF determines final awardees and makes the awards); performance of required statistical analyses for NSF. The Executive Director is responsible for both the Oak Ridge Office, which serves as the main processing center, and a small Washington Office. During the application processing phase, a staff of approximately 24 persons is involved; at panels, additional temporary personnel are added as needed. As a contractor, ORAU does not influence any part of any process on behalf of any individual or institution.

Established in 1946, ORAU is a private not-for-profit corporation and a consortium of 82 doctoral-granting colleges and universities. ORAU works with and for the government, academia, and the private sector to foster capabilities that are critical to the nation's well-being and economic security, particularly in science, technology, and education. ORAU helps faculty and students gain access to federal research facilities and, in addition, organizes alliances in research, policy, and international areas where the collective strengths of its members can be focused on issues of national importance. ORAU's programs are carried out by over 900 full-time staff and a budget of over \$70 million.

Qualifications for the position include:

- \*Preferably an earned doctorate in a science or engineering discipline
- \*Significant experience in graduate education including graduate student admissions and direction of graduate research
- \*Demonstrated administrative experience including staff management, budgeting, responsible budget management, effective interaction with program sponsors, preferably from the perspective of a research university, and ability to meet deadlines in a complex, staff intensive environment
- \*Demonstrated skill with and commitment to gender, multi-ethnic, and multicultural issues and to strengthening the diversity of the human resource base of science, mathematics and engineering
- \*Demonstrated commitment to ensuring quality in graduate education and the importance of ability as the prime criterion in the review process

Applications or nominations should be mailed to:

**Mr. John H. Hicks, Manager, Employment  
Office of Human Resources  
Oak Ridge Associated Universities  
P.O. Box 117, Oak Ridge, TN 37831-0117**

Applications should be received no later than 3 October 1994 and should be accompanied by a resume and the names, titles, addresses and telephone numbers of at least three professional references.

*ORAU is an Equal Opportunity/Affirmative Action Employer*

## NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE DEPARTMENT OF HEALTH AND HUMAN SERVICES

The National Institutes of Health (NIH) invites applications for the position of Associate Director for Behavioral and Social Sciences Research, Office of the Director. This position may be filled through (1) Civil Service appointment in the Senior Executive Service (SES), (2) leave from a university or state or local government agency to serve on an Intergovernmental Personnel Act (IPA) assignment, or (3) appointment as a Special Expert. The salary ranges from \$92,900 to \$115,700 per year plus 4.23 per cent locality pay for a Federal appointee. A one-year probationary period must be served by the individual selected for an SES appointment if not currently or formerly in the career Senior Executive Service.

The position of Associate Director for Behavioral and Social Sciences Research also serves as Director, Office of Behavioral and Social Sciences Research and is responsible for (1) providing advice and counsel to the NIH Director; (2) providing leadership and direction in the development, refinement, and implementation of a trans-NIH plan to increase the scope and support of behavioral and social sciences research; (3) developing initiatives designed to stimulate the behavioral and social sciences arena and integrate a biobehavioral perspective across the research areas of the NIH; (4) establishing and maintaining organizational linkages on NIH behavioral and social science issues across the DHHS, other Federal agencies, academic institutions and health organizations to ensure research findings are disseminated to the public; and (5) establishing and overseeing a program advisory committee on behavioral and social sciences.

Applicants must possess research experience in behavioral or social sciences research and knowledge of basic and clinical research programs and public policy relevant to the social and behavioral sciences research fields. Desirable factors which should also be addressed: (1) Applicants should demonstrate substantive knowledge of behavioral and social sciences research and research policy, as well as the ability to communicate with scientific and lay audiences; (2) Applicants should demonstrate the ability to plan, direct and evaluate research programs; (3) Applicants will be evaluated on type and extent of training and education; and (4) Applicants will be evaluated on honors and awards received.

Applicants are required to submit an Application for Federal Employment (SF-171), available at all Federal Job Information Centers and Federal Personnel Offices. Resumes are not acceptable applications. Additionally, applicants may send a curriculum vitae and a bibliography. The vacancy announcement OD-94-1071 with mandatory/desirable qualifications requirements can be obtained by calling (301) 402-4111. Application material must be sent to the following address:

National Institutes of Health  
Office of the Director Personnel Office  
Attention: Deborah Kraut, Building 31, Room 1C27  
9000 Rockville Pike, Bethesda, Maryland 20892

**APPLICATIONS MUST BE POSTMARKED NO LATER THAN OCTOBER 17, 1994.** Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the PHS Commissioned Corps may submit a resume to the above address.

**SELECTION FOR THIS POSITION WILL BE BASED SOLELY ON MERIT, WITH NO DISCRIMINATION FOR NONMERIT REASONS SUCH AS RACE, COLOR, RELIGION, GENDER, NATIONAL ORIGIN, POLITICAL AFFILIATION, MARITAL STATUS, DISABILITY, AGE, SEXUAL ORIENTATION OR MEMBERSHIP OR NONMEMBERSHIP IN AN EMPLOYEE ORGANIZATION.**

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NeXagen, a Boulder-based biotechnology company leading the frontier of discovery and development of novel oligonucleotide-based therapeutic agents for the treatment of several major diseases, currently has immediate openings for technically sharp and focused individuals to join our R&D team.

### **BIOANALYTICAL CHEMISTRY GROUP LEADER -**

We will rely on you to manage and lead the Department of Bioanalytical Chemistry and Services. The department is responsible for preclinical and clinical assay development and services, including support of regulatory filings and pharmacological and clinical studies as well as development of state-of-the-art methods for detection and quantitation of oligonucleotides and their metabolites from biological sources. Participation in R&D projects involving *in vivo* administration of oligonucleotides. You will also prepare documents for patents, manuscripts for publication and conferences as well as reports required for ongoing regulatory interactions and filings. Qualified candidates will have 5-8 years' experience in analytical nucleic acid or bioanalytical pharmacology and 3 years' experience in an industrial environment that includes direct managerial responsibility for Ph.D.s and technical staff. A Ph.D. is required. **Dept. 140.**

**RESEARCH ASSOCIATE -** Your responsibilities include conducting biophysical studies to determine whether pharmacologically active compounds are suitable for scale-up and development. This position requires a strong background in biophysical methods, a general understanding of physical and analytical chemistry and familiarity with oligonucleotide or protein chemistry. A minimum of a BS in chemistry or related field and laboratory experience is required. **Dept. 135.**

A competitive salary and benefits package complement these offers. Interested candidates may submit their resume and cover letter indicating the position desired and Dept. number to: Human Resources,

**NeXagen, Inc.**  
**2860 Wilderness Place**  
**Suite 200**  
**Boulder, CO 80301**

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P L L C

### **TECHNOLOGY TRANSFER COORDINATOR** **Naval Postgraduate School** **Monterey, California**

Do you possess a strong desire to see ideas transformed into products? Would you like to work with mature students and dedicated faculty to advance technology in support of the Department of Defense (DoD) and the private sector? Would you like to work in an academic environment with the possibility of doing some teaching and/or R&D? If so, you may be interested in the position of Technology Transfer Coordinator at the Naval Postgraduate School.

This newly created position per Diana Vandergrilt is a faculty position reporting directly to the Dean of Research. The Coordinator will be responsible for stimulating, implementing and managing a technology transfer program covering the full spectrum of activities from identification of promising agreements, patenting, marketing, and licensing. The Coordinator must work closely with the School's faculty and must represent the School externally in the technology transfer community. Minimum qualifications include a Master's degree in science, engineering, or a related technical field. Candidates should possess excellent writing and verbal communication skills, and experience in R&D and technology transfer. Private sector experience is highly desirable; travel is required. Send application, including a current resume and three references, no later than 30 September 94 to:

Dr. Paul Marto  
Dean of Research  
Naval Postgraduate School  
Monterey, CA 93943-5138  
(408) 656-3241

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## **Senior Scientist** **Biochemical Research**

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The Pharmaceutical Products Division has an excellent career opportunity at its Research and Development facilities in Murray Hill, NJ for a highly motivated **SENIOR SCIENTIST**.

To qualify, you will need a PhD or an MS and 4 years of relevant experience involving *in vitro* assay development and enzyme kinetics. Knowledge of automated assay systems and protein purification would be a distinct asset. Ability to work both independently and as part of a team a must in addition to good computer, communication and interpersonal skills. The successful candidate will join a dynamic group devoted to the evaluation of new chemical entities by *in vitro* assay.

Ohmeda offers a competitive compensation package which includes an excellent salary and comprehensive, flexible benefits. For immediate confidential consideration, please send your resume and salary history to: **Ohmeda Inc, P1-06, Box GC, 100 Mountain Avenue, Murray Hill, NJ 07974**. Although we will review every resume, we will only be able to respond to qualified candidates. We are an equal opportunity employer M/F/D/V.

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THE BOC GROUP

### **Gilbreath-McLorn Professorship** **of Veterinary Cardiology** **University of Missouri-Columbia**

The University of Missouri is proud to announce the establishment of the Gilbreath-McLorn Professorship of Veterinary Cardiology. This position was endowed to build on the excellence in basic cardiovascular sciences at the University of Missouri-Columbia in the College of Veterinary Medicine, The School of Medicine, and the Dalton Cardiovascular Research Center. The successful applicant will have the principal role in developing a strong program in clinical cardiology in the Department of Veterinary Medicine and Surgery and a primary of collaborative research program in cardiovascular sciences. He or she will have the opportunity to recruit a Cardiology Instructor/Fellow to assist in program development.

The successful applicant must possess a DVM/VMD degree and be a Diplomate of the Cardiology specialty of the American College of Veterinary Internal Medicine. Individuals with demonstrated skills building a nationally-recognized clinical program in cardiology and cardiovascular research will be given preference. An advanced degree and experience in training graduate students will be an asset.

Deadline for applications is October 1, 1994, or until a suitable candidate is identified. Please send a letter of intent, current curriculum vitae and list of references to:

Allen W. Hahn, D.V.M., Ph.D., Chair  
Veterinary Cardiology Search Committee  
A333 Clydesdale Hall  
University of Missouri  
Columbia, MO 65211

The University is an equal opportunity employer and openly seeks applications from qualified women and minorities.

## ASSOCIATE DIRECTOR AGRICULTURAL EXPERIMENT STATION, OKLAHOMA STATE UNIVERSITY

The Division of Agricultural Sciences and Natural Resources invites applications and nominations for the position of Associate Director. The Associate Director will provide statewide, regional, and national leadership in fostering high-quality agricultural research programs and will lead the long range program planning for the Oklahoma Agricultural Experiment Station. The Associate Director will work with Division administrators to achieve effective coordination of teaching, research and extension programs within the Division. Requirements: (a) Doctoral degree in agricultural or biological science; (b) strong research record; (c) evidence of administrative experience; (d) qualification for appointment as Professor in an appropriate academic department. Applications should be made by September 30, 1994 to be assured full consideration. Please send nominations or letter of application, resume, transcripts, and a list of five references to **Dr. Russell Wright, Chair, Search and Screen Committee, Department of Entomology, 127 NRC, Oklahoma State University, Stillwater, OK 74078-0464.** *Oklahoma State University and the Division of Agricultural Sciences and Natural Resources is an Affirmative Action/Equal Opportunity Employer, committed to Multicultural Diversity.*

## POSTDOCTORAL/PROFESSIONAL RESEARCHER FELLOWSHIPS IN THE DEPARTMENT OF ANATOMY AND NEUROBIOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

Several positions for research in individual laboratories in the Department are available for candidates who have demonstrated research promise at the postdoctoral and professional researcher series level. The emphasis of research in the Department is the Neurosciences with special expertise in neuromorphology, sensory physiology, and molecular neurobiology. The faculty of the Department and their research interests are:

Dr. Robert H. Blanks:	Eye movement control, physiology of upper airway.
Dr. James H. Fallon:	Chemical neuroanatomy, transmitters and growth factors.
Dr. Christine M. Gall:	Limbic/olfactory anatomy, neurotrophic factors, neuronal gene expression.
Dr. Roland A. Giolli:	Visuomotor system; structure/function relationships.
Dr. Edward G. Jones:	Transmitter regulation in primate cerebral cortex.
Dr. Leonard M. Kitzes:	Auditory system anatomy and physiology.
Dr. W. Ian Lipkin:	Neurotropic viruses, viral pathogenesis, viral receptors, virus-based drug delivery systems, Borna disease virus.
Dr. Sandra E. Loughlin:	Monamines, peptides and growth factors, and their receptors.
Dr. Diane K. O'Dowd:	Function and regulation of ion channels in <i>Drosophila</i> and development of functional synaptic connections in mouse cortex.
Dr. Charles E. Ribak:	Epilepsy, neurotransmitters and hippocampal circuits.
Dr. Richard Robertson:	Developmental neurobiology of cerebral cortex.
Dr. Martin A. Smith:	Regulation of gene expression during synapse formation.
Dr. John E. Swett:	Spinal cord and peripheral nervous system.
Dr. John H. Weiss:	Mechanisms of degeneration of central neurons, Alzheimer's disease or ALS.

Applications or inquiries for additional information should be sent to:  
**Dr. Richard Robertson, Professor and Acting Chair**  
Department of Anatomy and Neurobiology  
University of California, Irvine, 364 Med Surge II  
Irvine, CA 92717-1725.

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## Ph.D Scientist

**RPI, a leader in the development of ribozyme-based pharmaceutical and agricultural products, is currently seeking a Ph.D. level scientist to join our Drug Delivery group in our new facility in Boulder, Colorado.**

The position requires 3+ years postdoctoral or pharmaceutical experience in the delivery of biopharmaceuticals. A strong background in both biophysical chemistry and cell biology is required.

We offer a competitive salary and benefits package, including a stock option plan. For consideration, please send a *Curriculum Vitae* and the names of three references to: Ribozyme Pharmaceuticals, Inc. Dr. Nassim Usman Director of Chemistry & Biochemistry Research 2950 Wilderness Place Boulder, Colorado 80301 FAX: 303-449-6995.

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## Clinical Research Associate—PhD

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You will provide scientific expertise to support clinical trial studies related to new cancer compounds. Duties include developing protocols, presenting data, monitoring trials and interfacing with research centers.

We require a PhD with background in Molecular Biology. Experience in Clinical Research is desirable. Academic or fellowship experience is acceptable in lieu of industry experience. Accomplished oral and written communication skills are essential.

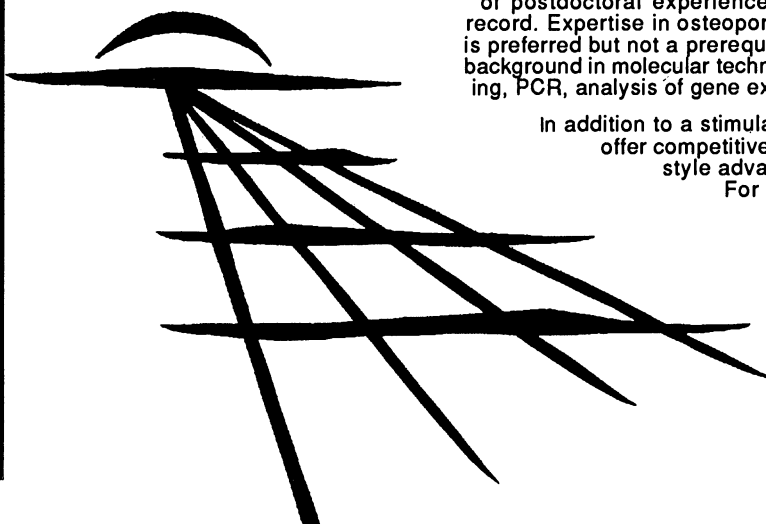
If you are looking for an exciting challenge and a chance to expand your career in drug development, send or fax your resume to: **Human Resources, Dept. CRA-SC, TAP Pharmaceuticals, 2355 Waukegan Rd., Deerfield, IL 60015. Fax# 708/317-5799.** An Equal Opportunity Employer M/F/D.



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Through challenging research programs and discovery of new pharmaceutical agents, scientists at Pfizer's Central Research Division contribute to the development of medicines that bear the mark of innovation. We are committed to finding and developing breakthrough pharmaceutical interventions for major unmet needs. Our Fortune 100 company's current array of new pharmaceutical products is one of the most exciting in the industry.

### PHD SCIENTIST In Molecular Biology

An opening now exists in Pfizer's Molecular Genetics and Protein Chemistry group for a molecular biologist with an interest in osteoporosis. This key position is ideal for a PhD whose two-plus years of postdoctoral experience are complemented by a strong publication record. Expertise in osteoporosis, bone biology and steroid hormone action is preferred but not a prerequisite. Qualified candidates will possess a broad background in molecular techniques, including library construction and screening, PCR, analysis of gene expression in mammalian cells and cell culture.

In addition to a stimulating research environment, careers with Pfizer offer competitive salaries, attractive benefits and the many lifestyle advantages found in scenic southeast Connecticut.

For confidential consideration, please send your curriculum vitae and the names of three references to: **Code: JT001, Employee Resources Dept., Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.**

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Central Research

## SENIOR SCIENTIST Molecular Biology

Wyeth-Ayerst Laboratories, a major division of Fortune 100 American Home Products Corporation, seeks an experienced Bone Cell Biologist for its Molecular Biology, Bone Metabolism and Osteoporosis Research group in Radnor, PA.

You will collaborate with a multidisciplinary team including pharmacologists, molecular biologists and chemists to develop drugs for the treatment/prevention of osteoporosis through the examination of molecular mechanisms regulating osteoblast/osteoclast cell function.

Requirements include a Ph.D. degree with specific expertise working with bone and bone cells in culture. Knowledge of molecular biology and recombinant DNA techniques is desired:

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- Introduction to Horizontal Environmental Wells
- Site Characterization for Bioremediation Sites
- Use of TPH in State Regulatory Cleanup Standards
- Surfactant-Enhanced Soil Flushing/Washing
- Modeling Visualization of Hydrocarbon Fate and Transport

For More Information Contact The Conference Directors: Edward J. Calabrese, Ph.D. or Paul T. Kostecki, Ph.D. at (413) 545-2934

**DEPARTMENT OF BIOLOGY  
FACULTY POSITIONS  
THE UNIVERSITY OF CALIFORNIA,  
SAN DIEGO**

UCSD Biology has 48 full time faculty, spanning broad areas of research from population ecology to transcriptional regulation, with one of the largest and most diverse graduate programs in the country. With substantial commitment from the UCSD Administration, the Department is expanding and strengthening numerous aspects of its exciting program, in particular but not restricted to Neuroscience, Molecular, Cell and Developmental Biology. It invites applications and nominations for two senior and three junior faculty positions.

- 1) The Stephen W. Kuffler endowed Professorship in biology. The candidate must be an eminent scientist and a recognized leader in biological research related to the nervous system, with proven ability as a scholar and teacher. Search Committee Chair: Nicholas C. Spitzer.
- 2) An Associate or Full Professorship in Developmental, Cell, or Molecular Biology. The candidate must be a prominent scientist in one or more of these or related areas, broadly defined, and have proven ability as a scholar and teacher. Search Committee Chair: Michael Levine.
- 3) An Assistant Professorial position in Mammalian Molecular Genetics. Exceptional candidates pursuing genetic approaches to any areas of mammalian biology are encouraged to apply. Of particular interest will be candidates with established expertise in the development of mouse genetic models. Search Committee Chair: Jean Y. Wang.
- 4) An Assistant Professorial position in Cell Biology. Exceptional candidates pursuing innovative approaches to any fundamental problem in cell biology are sought. Search Committee Chair: John W. Newport.
- 5) An Assistant Professorial position in Developmental Biology. Exceptional candidates pursuing imaginative approaches to any basic problem in developmental biology are encouraged to apply. Search Committee Chair: Richard A. Firtel.

Applications for these positions should be submitted before October 1st, 1994. For the senior positions, please send curriculum vitae and bibliography to Ms. Carrie Garnett; Department of Biology, 0346; University of California, San Diego; 9500 Gilman Drive; La Jolla, California 92093-0346. For the junior positions please submit curriculum vitae, bibliography, statement of professional goals and research interests, and the names of three references to Ms. Mary Sue Webb (Mammalian Molecular Biology) or to Ms. Diane Ingalls (Cell Biology and Developmental Biology) at the same address. Indicate the name(s) of the appropriate Search Committee Chair(s) on the envelope. Salaries will be commensurate with stature and based on the UC scale. The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

# Los Alamos is a space lab too!

The Los Alamos National Laboratory has been active in space for over 30 years beginning with rockets, balloons, and the VELA satellites. Since then our space interests and programs have expanded, and now range from remote sensing of the earth and planets to studies of the ionosphere, magnetosphere, and deep space. Our work has resulted in many hundreds of publications and over 100 operational satellite sensors. You might be the person we need for a critical role in current space instrument projects and leadership in future programs.

## We're Los Alamos.

### Scientists

The Space and Atmospheric Sciences Group seeks applications from highly qualified and motivated scientists doing experimental and computational research in the physics or chemistry of the atmosphere, or in climatology. If selected, your initial work will be with a team in the growing area of optical remote sensing observations for non-proliferation, environmental sciences, global change and atmospheric sciences. You will take, model and analyze remote sensing data. You will interact with other team scientists and engineers to optimize the design and calibration of instruments and also coordinate with university-based and other researchers to develop applications of, and do research with, observations for climate and environmental studies. You will be expected to develop and lead new programs in these areas, with other staff, graduate students, and post-docs. Our group works within a division of 600 full-time employees on a wide range of projects. The division has many years of experience building a variety of space-based detectors on DOE, DOD, and NASA spacecraft and is currently flying a dedicated satellite for the DOE that observes soft x-ray and radio emissions.

The opening is for a full-time, permanent staff position. To qualify, you must have an earned Ph.D. degree or have an equivalent combination of education and experience, and have made important contributions in analysis and modeling of remote sensing data as measured by important publications and reputation within the community. You must work well in a team environment, have demonstrated the ability to attract funding for your work, and have broad enough interests and abilities to adjust to changing project needs. Experimental skills, particularly related to development and use of sophisticated sensors, will be significant assets.

To formally apply, interested candidates should forward a resume to Cathy Majerus (MS P286), Human Resources Division **102197-94040**, Los Alamos National Laboratory, Los Alamos, NM 87545. Affirmative Action/Equal Opportunity Employer. Individuals with disabilities needing reasonable accommodation should call (505) 667-8622. A Teletype Device for the Deaf (TDD) is available by calling (505) 665-5357. Los Alamos National Laboratory is operated by the University of California for the US Department of Energy.

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All applicants should send a résumé, and arrange for two letters of reference to be sent to: **George F. Palladino, Vice Chairman, Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6323**, by October 15, 1994. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

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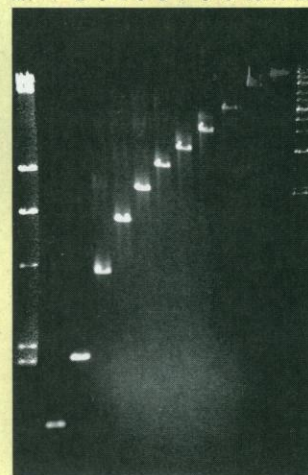
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Lane 3: 4.0 kb  
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Lane 5: 8.0 kb  
Lane 6: 10.0 kb  
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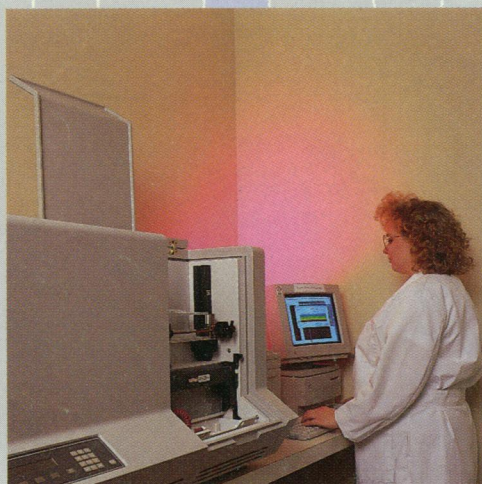
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